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Graversen, Marie Engstrøm

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# **ACCOUNTING FOR THE DANISH PUBLIC SCHOOL SYSTEM**

INCENTIVES & PRACTICE

BY  
**MARIE ENGSTRØM GRAVERSEN**

DISSERTATION SUBMITTED 2015



**AALBORG UNIVERSITY**  
DENMARK



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By

Marie Engstrøm Graversen



**AALBORG UNIVERSITY**  
DENMARK

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## ABOUT THE AUTHOR

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Marie Engstrøm Graversen received her Master's degree in Social Science (cand. soc. in Business Administration & History) from Aarhus University in 2010. Shortly hereafter she began her PhD fellowship at the Department of Business & Management at Aalborg University where she has been affiliated with the research group Management, Accounting and Control (MAC).

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## ENGLISH SUMMARY

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Studying and thereby enhancing the understanding of the behavioral impact of the formula funding models used to allocate funds from the Danish municipalities to the local public school districts is the aim of this dissertation. In addressing the overall research question of *how do formula funding models in the context of Danish public school funding affect local managerial practice*, the study combines the two separate sets of discussions that of formula funding model design and that of incentives and behavioral responses. A framework for the study of formula funding model design and managerial practice is proposed which, based on the theoretical understanding of viewing a formula funding model as a package of control, puts forward that the joint effects of the funding model components will determine respectively the actual competitive pressure and level of budgetary risk brought upon the providers, and therefore with it the resulting managerial practice created.

The framework is applied in two qualitative field studies carried out in two Danish municipalities. In each field study, the technical components of the funding model are analyzed, followed by a discussion of the funding model in the light of the developed framework bringing forth a discussion of the theoretical practice created by the specific model. Finally, the studies present an account of how school management is actually practiced. Focusing on the guiding principles affecting the daily practices of the local management the accounts visualize how education concerns are weighted against the model's inherent incentive structures. In this way, the dissertation seeks to elucidate how the potential field of tension between education and budgetary related concerns is balanced when decisions are to be made.

The study reveals that the managerial practice of the management under study is strongly affected by the specific formula funding model design; which influences and determines the scope for action but at the same time also the opportunity/danger for more adverse behavioral responses to be triggered. The field studies make plain that the level of competitive pressure and budgetary risk are very influential in ensuring that the funding model is more than a reimbursement system, making it instead a mean through which providers are encouraged to operate prudently and efficiently ensuring also the quality of services. A correct balance of or mix between the level of budgetary risk and competitive pressure must however be found. The dissertation brings forth strong arguments for the importance of understanding the formula funding model as a full package of control, in that, the field studies reveal how the components may come with oppositely directed incentives, creating further potential positive or negative synergies. Moreover, the dissertation contributes with important insights into the behavioral effects of different payment types and the impact of different design choices in relation to the national vision of inclusion. Further, the dissertation brings forth important insights into the advantages and disadvantages associated with linking budgetary and education-related responsibilities locally.



## Økonomi eller Faglighed? Incitamenter og praksis

Denne afhandling har til formål at studere kommunale budgetbevillingsmodeller og disses indflydelse på lokal skoleledelsesadfærd. Ved at kombinere teori omkring budgetmodelkomponenter og teknisk design med viden omkring incitamenter og adfærd søger afhandlingen at besvare det overordnede forskningsspørgsmål; *hvordan påvirker de budgetbevillingsmodeller som benyttes på det danske folkeskoleområde lokal ledelsesadfærd?* I afhandlingen foreslås et teoretisk framework til analyse af sammenhængen mellem teknisk design og ledelsesadfærd. Frameworket er baseret på den teoretiske forståelse af vigtigheden af at anskue en budgetmodel som en samlet kontrolpakke. Der argumenteres for, at den samlede effekt af en budgetbevillingsmodels kontrolkomponenter er afgørende for det samlede konkurrencepres og den konkrete budgetrisiko, og dermed for den følgende lokale ledelsesadfærd. Den teoretiske analyseramme sættes i spil i to kvalitative studier udført i to danske kommuner. I hvert af disse analyseres kontrolkomponenterne i den konkrete budgetbevillingsmodel, hvilket efterfølges af en diskussion af den teoretiske praksis som opstår som følge af den specifikke budgetmodel. Slutteligt følger en praksisdrejet analyse af den faktiske skoleledelsesadfærd i den enkelte kommune. Analysen tager udgangspunkt i de principper som påvirker ledelsesadfærden og forsøger at visualisere hvordan faglige og pædagogiske overvejelser balanceres imod budgetbevillingsmodellens finansielle incitamenter. På denne måde forsøger afhandlingen at belyse, hvordan det potentielle spændingsfelt mellem faglige og budgetmæssige overvejelser balanceres lokalt i en beslutningsproces.

Overordnet viser afhandlingen, at den ledelsesmæssige praksis i høj grad påvirkes af budgetmodellens design. Et design påvirker og danner rammerne for det lokale ledelsesrum, men også muligheden/risikoen for at uønskede adfærdsmæssige reaktioner opstår. De to kvalitative studier viser med al tydelighed, at det samlede konkurrencepres samt budgetrisikoniveauet er centrale parametre til sikring af budgetbevillingsmodellen som mere en blot end refusionsmodel, nemlig som et aktivt værktøj til påvirkning af lokal ledelsesadfærd. Det er dog centralt at en korrekt balance mellem budgetrisiko og konkurrencepres findes. Afhandlingen fremlægger klare argumenter for vigtigheden af at studere og forstå en budgetbevillingsmodel som en samlet kontrolpakke, idet analyserne viser, hvordan budgetmodellens enkelte komponenter kan frembringe og motivere modsatrettede incitamenter, samt muligheden for at skabe både positive og negative synergieffekter. Afhandlingen bidrager med vigtig viden omkring de adfærdsmæssige konsekvenser af forskellige betalingsmetoder, men også vedrørende effekten af forskellige designvalg i forhold til den nationale målsætning om at skabe mere inklusion i den danske folkeskole. Endeligt bibringer afhandlingen med vigtig indsigt i fordelene og ulemperne ved at samle fagligt og budgetrelateret ansvar lokalt.

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Marie Engstrøm Graversen, Aalborg University, July 2015

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## CHAPTER 1. INTRODUCTION

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### 1.1. INTRODUCTION

The Danish Education Act § 2, specifies that the municipalities hold the responsibility for the organization and funding of the Danish public school system within a framework set up by laws, ordinances, rules and guidelines laid down by the Ministry of Education. Not only is the individual municipality responsible for providing a satisfactory level of education, but they must also ensure that the delivery of service is conducted within the agreed budgets. Thus, albeit restricted by externally decided conditions the individual municipality is left with a high level of freedom when it comes to organizing and funding; making it the main actor in the governance of the public school system.

In the wake of the global financial crises Danish public spending has come under increasing pressure and the municipal system has been subjected to strict demands for consolidation and budget compliance. The limited opportunities for growth in public spending means that developments of municipal services must be accomplished within a more controlled and restricted financial frame; in turn requiring the municipalities to prioritize and become innovative in their delivery of service. Simultaneously with this increased focus on spending and budget compliance a new public school reform was passed in 2013 by the Danish parliament, under the banner: *“Denmark has a good public school, but it needs improvement to become even better”* (Text of agreement 7 June 2013:1). The reform which came into force in the school year 2014/15 is intended to counter a renewed concern with the academic level of pupils and with the ability of the public school system to adequately prepare them for further education. In 2012 15-17% left the public schools without sufficient skills in Danish and Math. It was believed that the neither the full potential of the academically weak pupils nor that of the academically gifted was realized and on top of this too many pupils are referred to special needs education (Text of agreement 7 June 2013).

The new school reform reflects the ever-present political interest in the public school system and in the activities and foundations upon which it is build; an interest which since 2001 has been manifested in more than 30 amendments to the Education Act. In this potential field of tension between education-related goals and calls for improved productivity and efficiency the design of the municipal funding models used to allocate funds from the municipal level to the local school districts is called into question; with the recommendation that the funding models are to be redesigned so to support the political vision of making the public school system more inclusive (see e.g. Ministry of Finance 2010). The funding model constitutes the main mechanism for management control in that it not only specifies the basis

upon which funds are to be allocated but also frames the decision-making scope available to service providers. The transfer of resources and the accompanying controls in this way, Broadbent *et al.* (2010:507) argue, come to act as an indirect steering mechanism for behavior. Making the specific design of the funding model crucial as its function is not only to provide a budgetary allocation model, but also to encourage behavior in accordance with the political objectives and to discourage behavior which is not. This places the incentives structures of the funding models at the center of attention.

The effect of financial incentives on behavior has primarily been studied in a private sector context (see e.g. Otley 1978; Briers & Hirst 1990; Laverly 1996; Hartmann, 2000; Van der Stede 2000). Yet, it has also become a subject of study in the context of public sector governance (Oates 1999; Dixit 2002; Burgess & Ratto 2003; Van Helden 2005; Pollitt 2006; Bevan & Hood 2006; Verbeeten 2008). In the research literature incentives have been found to influence behavior, also despite the fact that they in the public sector are directed towards specific organizational/governance levels and not towards the individual level *per se*. The focus of study, however, has mainly been the theoretical implications and roles of incentives from the standard economic Principal-Agent perspective. This theoretical perspective affects the overall results and conclusions, in that, more qualitative driven motivations are omitted or only scarcely discussed as theoretical behavioral responses stemming from the nature of the public sector (Dixit 2002).

There is however a growing agreement in the literature that non-monetary mechanisms such as social norms and professional perceptions affect the understanding of what constitutes correct and prudent practice in the context of public service delivery. ‘Public service’ and ‘intrinsic’ motivation are examples of factors which have been found to guide and motivate public sector employees; with professional norms for example acting as internal self-regulating control mechanisms which may hamper or dilute the intention of the otherwise implemented financial incentives (Pedersen *et al.* 2006:125). As a result studies are questioning whether financial incentives are all-explanatory when seeking to understand behavior (Dixit 2002; Burgess & Ratto 2003; Besley & Ghatak 2003; Verbeeten 2008; Andersen & Serritzlev 2006; Andersen *et al.* 2010). At the same time, the incorporation of financial incentives into the formula funding models is by itself by some considered to be a contentious issue, in that, the allocation of funds in their eyes should be needs-based. That is, driven by actual needs of the pupils with the subsequent managerial practice remaining unaffected by other considerations than that of meeting the actual needs of the pupils as appropriately as possible.

The purpose of this dissertation is to study the effects of formula funding models on local managerial practice, seen in the light that formula funding constitutes the main method of allocation in the context of Danish school funding. The Danish public school system is a field characterized and guided by a strong presence of profes-

sional norms, ethics and self-perceptions associated with that of being a teacher and a principal of school (Ratner 2009). Potentially this places the school management in a dilemma between the external demands for efficiency and the more internally driven values of the teacher profession. For this reason the design of the funding models becomes ever more vital for encouraging behavior which is in line with the service area's objectives; making the public school system an extremely interestingly setting in which to study the effects of financial incentives.

In order to do so the dissertation proposes a theoretical framework for the study of formula funding model design and managerial practice. This is subsequently applied in two qualitative field studies carried out in two Danish municipalities. The field studies are intensive in nature and intended to provide a "rich" understanding of the formula funding models and the resulting managerial practice. In each field study, the technical components of the funding model are firstly analyzed, followed by a discussion of the funding model in the light of the developed framework bringing forth a discussion of the theoretical practice created by the specific model. Finally, the studies present an account of how school management is actually practiced. Focusing on the guiding principles affecting the daily practices of the local management the accounts seek to visualize how education concerns are weighted against the model's inherent incentive structures. In this way, the dissertation seeks to elucidate how the potential field of tension between education and budgetary related concerns is balanced when decision are to be made.

The aim is to bring about both theoretical and practice/policy-related contributions. Through the proposed framework the dissertation brings together technical aspects of model design and knowledge on incentives and behavioral responses. Creating thereby a deeper theoretical knowledge of management control and behavior in the context of public sector governance by. Studying the formula funding models as a *package of control* the framework represent a unique tool for analyzing and understanding the relationship between funding models and managerial practice.

The presented field studies provide a so far unique analysis of the connection between funding models and behavior, relevant from a theoretical perspective. But the proposed framework is also relevant from a practical perspective, in that, it elucidates the effects of specific design choices to public sector decision-makers. The dissertation contributes with a practical relevant tool for evaluation by firstly identifying the components making up a formula funding model and then by proposing a setup for analyzing the joint effects of the total set of model components on the resulting managerial practice. In situations for example where the specific mix of controls is to be changed, the framework may be used to evaluate how a redesign of specific components will influence the actual configuration of the funding model and with it the resulting effect on managerial practice. Thus, potentially improving local decision-making and increasing the awareness of the consequences of specific design choices.

## 1.2. RESEARCH QUESTIONS

Formula funding has been a recurrently studied subject in research communities such as management accounting, finance and economics (Meisinger 1976; Moss & Gaither 1976; Mayston 1998; Smith 2003, 2007a, 2007b). Here the focus has mainly been that of studying payment methods and their associated incentives in areas such as health care (see e.g. Aas 1995; Ellis *et al.* 1996; Ellis 1998; Silverman *et al.* 1999; Smith *et al.* 2001, Smith 2008) and in the funding of higher education institutions (see e.g. Heald & Geaughan 1994; Angulin & Scapens 2000; Talib 2001, Zierdt 2009).

Similar when formula funding has been studied in a public school context the focus has been on the formula itself evaluating it in the light of the efficiency and equity created. See for example BenDavid-Hadar & Ziderman (2010), the UNESCO publication edited by Ross & Levačić (1999) which presented five case studies of formula funding (later compared in Levačić *et al.* 2000) or Levacic (2007) which based on the same approach compared the formulae deployed in seven European countries. As the focus or reference point in this part of the literature has been the basic funding mechanism or payment method deployed this has led to a prevailing use of economic/statistical approaches (e.g. Levačić 1993; Smith 2003) or that of more conceptual ones (e.g. Ross & Levačić 1999; Levačić 2007). Affecting again the type of problems addressed and not at least the type of conclusions drawn.

A growing body of management accounting literature, applying more qualitative approaches, is however emerging and within school funding this has led to studies into the effects of funding on changing accountability patterns, analyzing also the effects of devolvement of decision-making on local budgeting practices (see e.g. Broadbent *et al.* 1993; Broadbent *et al.* 1999; Edwards *et al.* 1995, 1996, 1997, Edwards *et al.* 2005; Neu 2006; Bracci 2009; Ezzamel *et al.* 2007, 2012; Agyemang 2010). Yet, the focus or reference point in this part of the literature has also been that of formula funding or the particular allocation method used more broadly and the studies have thus not captured or studied the effect of the full funding model.

There is thus an important gap in the literature when it comes to understanding the actual behavioral impacts of formula funding models. The so far sole focus on the formula mechanism is problematic, Smith (2007a:152) argues, in that the formula mechanism on its own rarely secures all the payer's objectives. Rather, situations may occur where the specific incentives springing from the broader funding model actually act against or hamper some of the payer's objectives. A deeper technical knowledge on formula funding model design and the resulting effect on practice is thus needed. This is not at least so as the predominant use of economic or statistical approaches has meant that when the implications and effects of formula funding has been discussed this has mainly been done at a somewhat detached or loose basis through for example the use of secondary data (Agyemang 2010:84). With the im-

plication that the field in practice has come to be governed by anecdotal evidence and haphazardly attempts to control behavior.

By bringing together the two otherwise separate discussions of technical design and the creation of managerial practice the dissertation seeks to amend this gap in the literature. Taking on a more holistic perspective focusing not exclusively on the payment method used to allocate funding the overall purpose of this dissertation becomes that of answering the question of *how do formula funding models in the context of Danish public schools affect local managerial practice?* In order to answer this question a range of sub-questions, reflecting both theoretical and practical matters are developed. Addressing firstly that of formula funding models, their design and implementation in practice the following sub-questions are put forth:

- What components make up a formula funding model?
- How are formula funding models implemented in practice?
- How is management control affected by formula funding model design?
- How do different circumstances and strategies affect management control in a school setting?
- How is strategy and control linked? In particular, does the policy on inclusion affect the formula funding model and the ability to create inclusion?

In relation to the second aspect concerning behavior and managerial practice this is addressed through the analysis of the sub-questions set forth below:

- Which inherent incentives and behavioral responses are created by the control components making up a formula funding model?
- What are the main control characteristics affecting behavior and managerial practice?
- How is the local managerial practice influenced by the incentive structures created by the formula funding model in place?
- Does the formula funding model affect the local approach to inclusion and the types of services given to pupils with special needs?

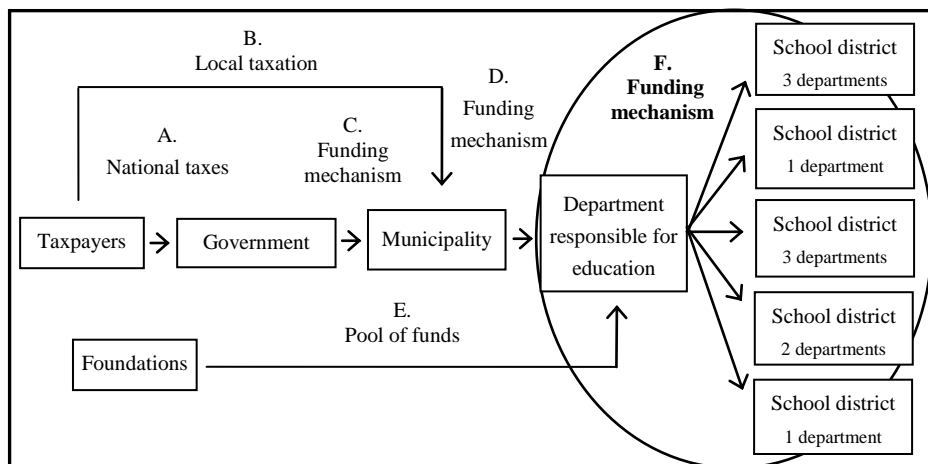
The next sections present in more detail the subject of study and how the dissertation intends to bring together funding model design and managerial practice.

### **1.3. STUDYING FORMULA FUNDING MODELS AS A PACKAGE OF CONTROLS**

The funding model under study is that used to allocate funds from the municipal administration responsible for the school system to the local school districts. In this context it is important to note that the furthest devolved budgetary entity is the '*school district*' and not the specific '*school department*'. A school district may consist of a single department and then the '*district*' is equal to that of the '*school*

department'. A district can however also be made up by several departments run jointly by one management team. The furthest devolved funding entity which funds are directly allocated by the funding model is however in all cases the district. In the collected data, which consists of both semi-structured interviews and different types of documents but also throughout the dissertation itself, the term *school* is sometimes used interchangeably when referring to the overall district or a particular school department. This might create confusions yet the context in which the word is used should make it quite clear what is actually meant.

Figure 1.1 offers an illustrative example of how a school system may be organized, emphasizing the prime focus of study. As for the overall flow of funds in the Danish public sector local taxation, briefly explained, accounts for the vast bulk of revenues a municipality receives. Additional funding can also be obtained through European or private foundations (E). For example illustrated by the 2013 donation of one thousand millions DKR to the Danish school system from the A.P Møller Fonden, intended to enhance the skills and education of teachers, pedagogues and principals, as well as improving and rethinking the teaching methods used.



- Figure 1.1 Flow of funds in the public sector, from taxpayers to school districts

The yearly negotiation between the Government and Local Government Denmark sets the financial frame for all municipalities as a whole, and determines the overall frame for taxation for the next year. Based on this and combined with other contractual conditions, block grants and harmonization subsidies are calculated and allocated to the 98 municipalities. From this stage on the individual municipality enjoys a high degree of freedom over the setting of priorities, taxes, user' charges and over how funds are to be spent across service areas. According to §82 of the Danish Constitution the municipalities have the right, under state supervision, to independently manage their affairs (as set by the Law) with the Administration Act further declaring that the municipalities hold the final appropriation authority in

terms of allowing budget holders to incur revenues and expenses. The municipalities are thus given a high level of freedom over how a particular service area is to be organized, the level of funding to be spent here, as well as over the means through which funding is to be allocated (subjected of course to the constraints imposed by Law concerning the level and nature of the public services provided).

A range of line-items constitutes the different tasks and field of services for which a municipality by law is required to provide funding. In the context of school funding this includes funds for operating and running the public school system, subsidy grants to private schools and boarding schools for 14-17 year-olds, for pedagogical and psychological counseling (in Danish PPR), for after-school care and transportation of pupils to and from home. As well as funding for municipal special needs schools and special needs education supplied in the context of the Regions and finally also for further/supplementary training of staff.

The main municipal task, performed through the funding model under study, is to provide a budgetary allocation model which specifies how much funds are to be devolved to the service providers, for which purposes (line-items) and to whom responsibility is to be assigned. The funding model, in this way, defines the principles upon which funds are to be allocated and in the process makes visible lines of accountability. The model accordingly not only specifies how much funds a local service provider is to be responsible for but is also frames the decision-making scope within which they can and are to act. In other words, the funding model affects the options, actions, and tasks available for the service providers, making it the main mechanism for management control.

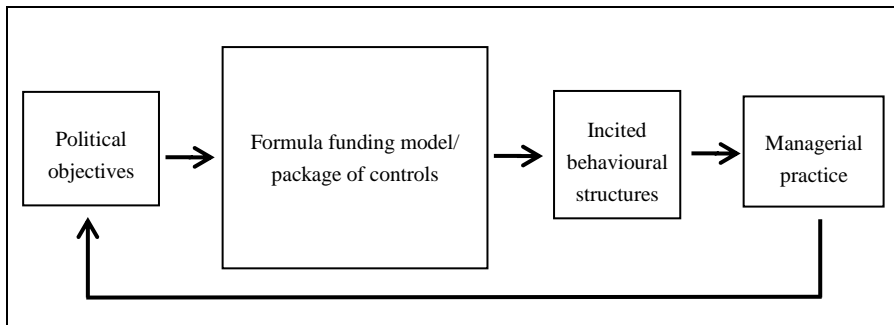
A crucial assumption in this dissertation is that a formula funding model must be studied as a *package of controls*. Following the definition brought forward by Grabner & Moers (2013:408) a management control package is understood as the complete set of control practices in place in an organization. A broader, more holistic understanding of what constitute control (see e.g. Malmi & Brown 2008) is thus adopted compared to more narrowly-focused definitions which tend to focus on specific aspects of control system design and use (see e.g. Covaleski *et al.* 2007 or Ferrerira & Otley 2009 for discussions on different notions of control).

The term package also points to the fact that multiple controls are used by organizations to steer behavior and that these different management control practices are often introduced at different times and by different people with the result that they are not necessarily internally coordinated. This understanding is in contrast to a management control system, which, according to Grabner & Moers (2013:408), is designed with the intention of creating complementarity and a maximization of “performance” by (simultaneously) deciding on multiple control variables. The control package is thus understood to encompass the complete set of control practices in place, regardless of whether these are interdependent and/or the design

choices take interdependencies into account. A control package is thus not *per se* designed with the intention of creating interdependency and goal congruence among control practices. Rather it is understood to be composed of a set of management control systems and/or a set of independent management control practices addressing potentially unrelated control problems (Grabner & Moers 2013). New control practices may thus be implemented or other components re-designed without taking into account possible interdependencies. Yet, when studying the resulting effect on behavior all practices or control components must be considered together, being part of the overall package of control (Grabner & Moers 2013:408).

This understanding is crucial in relation to formula funding models, in that, these models are precisely characterized by being made up by different components which due to the nature of the public sector governance system are not necessarily interdependent. Depending on the individual municipality specific control component may become subjected to recurring changes by different parties of the municipal system. Overall goal congruence in situations of re-designs or changes is thus far from given. The specific design choice may consequently bring forward behavioral responses which are potentially in- or out of line with the political set objectives. This makes the definition brought forward by Grabner & Moers (2013) extremely useful when studying formula funding models.

As a result the following relationship between political objectives, the formula funding model, its incentive structures and the resulting managerial practice is proposed, see Figure 1.2.



- *Figure 1.2 Proposed relationship between political objectives, the formula funding model, its inherent incentive structure and the resulting managerial practice*

As seen, the political objectives of a service area are proposed to be the guiding principles for the process of funding with the formula funding model functioning as the all important mechanism for creating behavior which is in-line with these objectives. This places the incentive structures of the formula funding model at the center of attention in that the specific design becomes all important for creating behavior which is in line with the political objectives, further ensuring that non-desired ac-



tions are not encouraged. Some incentives can be said to be intended and virtuous, serving to ensure the fulfillment of the payer's objectives, yet others can be more unintended or even adverse, potentially thwarting the overall intentions of the funding. In order to understand the full set of incentives the funding model must be evaluated as a whole, or as firstly suggested by Otley (1980:422) the full effect of the controls in place can only be understood in their entirety or "*as a package which can only be evaluated as a whole*".

Based on this understanding the dissertation firstly analyzes the components making up a formula funding model and secondly discusses the incentive structures and behavioral responses most commonly associated with a formula funding model. Combining these results a framework for the study of formula funding model design and managerial practice is developed where it is put forward that the joint effects of the funding model components will determine respectively the actual competitive pressure and level of budgetary risk brought upon the providers, and therefore with it the resulting managerial practice created. This overall relationship will thus not only guide the structure of the theoretical discussion but also the content and structure of the two field studies.

## 1.4. STUDYING ACCOUNTING AS PRACTICE

An inherent intention of the dissertation is the study of accounting as practice (see e.g. Boland & Pondy 1983; Dent 1986; Oakes *et al.* 1998; Miller 2001; Ezzamel *et al.* 2012), that is, studying how accounting attempts to "*intervene, to act upon individuals, entities and processes to transform them and to achieve specific ends*" (Miller 1994:1) or as described by Ahrens & Chapman (2006a:99) studying how "*people in organizations make specific uses of widely available solutions, how such solutions come to be at their disposal, and how their use might change existing accountings and give rise to new accounting solutions that others can use*".

In contrast to other communities of practices accounting crosses borders of diverse professions such as manufacturing, health care, education and social services, and in the process come to compete and intrude into the territories occupied by these other bodies of expertise (Miller 2001). Accounting is accordingly not a mere technical, rational service activity, separated from wider social relationships and implemented in order to aid decision makers (politicians or managers) in rational decision-making (Ezzamel *et al.* 2008). Rather, accounting practices influence perceptions, change languages and infuse dialogues, or as described by Hopwood (1983) shape the way in which concerns, dilemmas and new options and actions are expressed and prioritized (see also Miller & O'Leary 1994; Ahrens 2009; Jonsson 2009). Accounting practices are hence as much implicated in decision-making as in the processes of organizational learning, bargaining and rationalization (Burchell *et al.* 1980, see also Dent 1986).

In the words of Miller (2001:394), accounting practices are: “*called upon not just to calculate costs or evaluate investment opportunities, but also to increase efficiency, to promote economic growth, to encourage responsibility, and to improve decision making and enhance competitiveness*” (Miller 2001:394). Accounting thus provides symbolic meanings to calculations and in the process comes to affect the conduct of individuals so that they act freely; yet in accordance with specified economic norms (Miller 2001:380). This makes accounting simultaneously social and technical, or as described by Chapman *et al.* (2009:2): “*the roles of accounting co-emerge with the social relations that it helps make possible*” (see also Baxter & Chua 2009).

The study of accounting as practice therefore entails much more than studying the blueprints of accounting, i.e. the accounting manuals, budget rules and expenditure authorizations. Rather, the study of accounting as practice entails studying how accounting practices become practical resources that actors can manipulate in order to signal intentions, motivations and achievements (Ahrens & Chapman 2007:24). Accordingly this type of study first truly unfolds its potential when the focus is directed upon the actions and the ways in which organizational members draw upon accounting as a shared resource (see Ahrens & Chapman 2007; Barnes 2001). Opening up for a study of how various actors draw upon the rules, processes, ideals, and targets of management control practices within a more complex field of organizing practices (Ahrens & Chapman 2006a:108).

Accounting practices are in this dissertation studied in the context of Danish public schools through the presentation of two qualitative field studies focusing on the associated effects of formula funding models. The dissertation is however not merely interested in analyzing the theoretical effect of incentives brought upon local providers but also in the actual practice created. In order to capture the first part the dissertation put forward a framework for the study of formula funding model design and managerial practice focusing on the effects of the associated financial incentives on the managerial practice. Two control characteristics, respectively the level of budgetary risk and the level competitive pressure brought upon providers through the model are here proposed as the two central levers affecting behavior. Arising respectively from an internally and an externally inflicted source of uncertainty/risk these two control characteristics are claimed to be the main factors influencing local managerial practice, understood as the options, actions and tasks available to the local school management when performing their job.

The introduced framework is then applied in the two field studies resulting in an analysis of the control components making up the specific formula models together with a discussion of the associated incentive structures and theoretical implication on the managerial practice. Yet, by developing also accounts of how school management is actually practiced the dissertation brings about opportunities to discuss how education concerns are weighted against the incentive structures of the funding model. Bringing to light situations where financial incentives may be overruled by

more subjective and ‘quality oriented’ concerns stemming from e.g. the professional identity of being a school manager. The study thus adheres to the understanding that accounting practices must be studied ‘in action’ (see Chua 1986); adhering also to the understanding brought forward by for example Anderson & Widener (2007:319), that albeit the design of management accounting at the outset is guided by economic principles the social context and the flexibility of management accounting suggests that other social sciences (e.g. sociology, psychology, political science) may offer equally compelling explanations for observed practice.

## 1.5. CONTRIBUTIONS

The dissertation intends to bring about both theoretical and practice-relevant contributions. This duality is important as management accounting as noted by Kasanen *et al.* (1993:262): “*in the end, [is] a practical field where theory without **pragmatic** implications is empty*” (emphasis in the original). Although the literature on a recurring basis, starting with Scapens (1984) (see also Scapens 1994, 2008) and since then in numerous calls (Ittner & Larcker 2002; Hansen *et al.* 2003; Scapens 2006; Hoopwood 2008; van Helden & Northcott 2010; Malmi & Granlund 2009; Baldvinsdottir *et al.* 2010), has stressed the importance of placing greater attention on the practical relevance of accounting studies, this aspect has often been overlooked. When studying accounting in a public sector context the relevance to practice, van Helden & Northcott (2010:214) note, is however of special importance, in that, the “*academic findings have the potential to inform both managers and policy-makers*” (see e.g. Hitt 2005; Rynes & Sharpapiro 2005; Sharpapiro & Rynes 2005; Coleman 2007). Understanding the deeper relationship between formula funding design and behavior in a public school context is indeed relevant and a range of contributions to this area is proposed in this dissertation.

Theoretically the dissertation seeks to contribute to the growing body of research on management control in a public sector context (e.g. Kloot 1997; Kober *et al.* 2007; Batac & Carassus 2009; Broadbent *et al.* 2010, Aygemang 2010) in particular to the understanding of the relationship between management control and behavior (Edwards *et al.* 2005; Neu 2006; Bracci 2009; Ezzamel *et al.* 2007, 2012). This is done through the suggested framework which brings together the otherwise somewhat separate discussions of formula funding model design and behavior. Contributing therefore with a deeper technical understanding of the components making up a formula funding model but also of the resulting effect on managerial practice. Such a framework is to the best of my knowledge not to be found anywhere else in the literature, making it thus an important theoretical contribution.

By viewing the formula funding model through the lens of a *package of control* the dissertation further contributes to the growing body of research studying management control packages (see e.g. Otley 1980; Simons 1995; Otley 1999; Chenhall

2003; Malmi & Brown 2008; Ferreira & Otley 2009). Using the definition of a package of control brought forward by Grabner & Moers (2013:408), which entails that the control package “*represents the complete set of control practices in place, regardless of whether the MC [management control] practices are interdependent and/or the design choices take interdependencies into account*”, the dissertation ensure that the different control components and practices making up a formula funding model are studied in their entirety within the broader organizational context in which they invariably operate (Hopwood 1983). This more holistic approach to management control is important, Malmi & Brown (2008) note, in that it will facilitate better theories and more reliable conclusions on individual control practices and ultimately about the design of management control packages.

The dissertation further adheres to the call made by Broadbent & Guthrie (2008: 151) for the need of studying the behavioral effects of risk in the context of public sector governance, a subject which is important due to the impact that regulation has on practice in the public sector. The effects and significance of risk has mainly been studied in the context of the private sector, through the application of economic theories relating to the relationship between principals and agents (see e.g. Baiman 1982, 1990; Eisenhardt 1985; Gibbons 1997; Prendergast 1999; Bonner & Sprinkle 2002). Furthermore, the theoretical effect of uncertainty has been studied as a contingency factor, understood to affect the design and use of control systems (see e.g. Galbraith 1973; Williamson 1975; Ouchi 1979; Chenhall 2003). Yet the study of Calglio & Dittillo (2008) showed that uncertainty in effect is rarely included in contingency models or when it is, it is mainly considered subordinate to other variables such as ‘interdependence’ and ‘asset specificity’ (see e.g. Dekker 2004). A newer study into the effect of risk in a public school context is however Kominis & Dudau (2012), who through the application of Simons ‘Levers of Control Framework’ (1995), studied how a specific policy change (‘Every Child Matters’) led to a shift in the use of management control. Highlighting how the shift in use of control systems by the English government increased the risk and uncertainty imposed onto a local authority affecting the inter-organizational control in a way so that it facilitated a more interactive use of management control. This dissertation analyses the effect of risk in a more tangible manner in order to identify the control characteristics that can capture the behavioral effects of the full package of controls. Arising respectively from an internally and an externally inflicted source of uncertainty/risk two control characteristics are proposed to be the main levers influencing local managerial practice, namely the level of budgetary risk and the level competitive pressure brought upon providers through the model.

This widened theoretical understanding of component design and managerial practice is in indeed relevant from a practice perspective, in that, it elucidates the effects of specific design choices to public sector decision-makers, illustrating for example the actual effects of different design choices. The dissertation contributes with a hopefully practical relevant tool for evaluation, by firstly identifying the compo-

nents making up a formula funding model and then analyzing the joint effects of these model components on the resulting managerial practice by means of the proposed framework. This approach is intended as a tangible tool for analyzing and understanding current practice, in that, it can help to improve local decision-making and increase the awareness of the consequences of specific design choices. If for example another mix of control is wanted the framework can be used to evaluate how a redesign of specific components or the introduction of new ones will influence the actual configuration of the funding model and with it the resulting effect on managerial practice. All in all, the framework thus can be seen as an important tool for understanding current practice but also the associated effects of re-designs.

## 1.6. STRUCTURE OF THE DISSERTATION

Table 1.1 summarizes the structure of the dissertation which as seen is divided into five parts; each addressing different aspects of the overall research objective.

<b>Part I</b>	Chapter 2 – 4	The context in which Danish education funding operates
<b>Part II</b>	Chapter 5 – 8	Theoretical Framework and Methodology
<b>Part III</b>	Chapter 9 – 11	Municipality A
<b>Part IV</b>	Chapter 12 – 14	Municipality B
<b>Part V</b>	Chapter 15	Conclusions & Perspectives

- *Table 1.1 Structure of the dissertation*

Building on the notion that the context is important for understanding management control practices (firstly suggested by Hopwood 1983) **Part I** presents different aspects which are vital for understanding the context in which Danish education funding operates. Divided into three chapters, **Chapter 2** analyzes the main legislative developments from 1970 up until today. The core focus is on the continuous tension between centralization and decentralization which has characterized and affected the governance structures of the Danish education system. The chapter places this schism in a broader public governance perspective, discussing the effect of the legislative changes on local practice and decision-making. **Chapter 3** contributes to a deeper understanding of the context of education funding by focusing on special needs education. The chapter analyzes how the understanding and use of special needs education have evolved discussing also the effect of the division of budgetary responsibilities. Finally, **Chapter 4** reviews literature on formula funding presenting the general rationales behind, together with the advantages and disadvantages associated with distributing funds in accordance to a predetermined formula expressed in mathematical terms. The chapter focuses on the general aims associated with funding, namely efficiency, equity and managerial accountability,

while the more specific educational goals of the Danish school system are to be discussed later in connection with the two field studies.

**Part II** contains the dissertation's theoretical and methodological part. The first three chapters are theoretical in nature, with each chapter addressing different aspects of the proposed relationship between political objectives, the formula funding model, its inherent incentive structures and the resulting managerial practice. Focusing on the technical aspects of formula funding models, **Chapter 5**, identifies the main control components of such models and discusses formula funding models from the perspective of understanding them as a 'package of controls'. **Chapter 6** discusses the incentive structures and behavioral responses most commonly associated with formula funding models. The point of departure is here the identified rationales for implementing formula funding, i.e. efficiency, equity, accountability. Questions of quality and productivity are also included. The chapter thus studies how intentions can be reinforced or thwarted by specific design choices. In **Chapter 7** the results of the two previous chapters are combined into a framework for the study of local managerial practice. Finally **Chapter 8** presents the methodology adopted for the study of formula funding models in practice. Discussing the choice of qualitative field studies, the chapter also presents the overall research design, the two municipal settings as well as the type of data collected.

**Part III** and **IV** contain the two field studies. Taking on the same form the first chapter in each part (respectively **Chapter 9** and **12**) analyzes the technical components making up the relevant formula funding model. This includes a description of the political objectives of the school system and a thorough analysis of the funding model's control components. The analysis is guided by the theoretical frame put forward in Chapter 5 on the components making up the overall *package of controls* although the content is also influenced by the findings thereby bringing life to the intentions behind the funding model. Building on this, **Chapter 10** and **13**, analyze the funding model in the light of the developed framework in Chapter 7. The level of competitive pressure and budgetary risk imposed onto the districts by the funding model is studied and the funding model is placed at its relevant position in the rectangle of Figure 7.4. Hereafter the inherent incentive structures of the model are studied, thereby enabling a discussion of the theoretical practice created by the model. Finally in **Chapter 11** and **14** accounts of how school management is actually practiced in the two municipalities are presented. Focusing on the guiding principles affecting the local management in their daily practices these accounts intend to elucidate how education concerns are weighted against the models' inherent incentive structures. In the concluding part of each of the two chapters the managerial practice is compared against the fulfillment of the organizational objectives, in this way, highlighting whether or not the practice is in line with these objectives.

**Part V** finally makes up the concluding part of the dissertation. The purpose of this part is to gather and discuss the overall findings with the purpose of answering the

overall research question. **Chapter 15** compares and discusses the findings of the two field studies and in doing so the chapter addresses the proposed influence of the funding models on the local practice from different angles. This is done by firstly discussing the findings in the light of the developed framework. The core focus is here directed upon analyzing whether the financial incentives brought upon the two school systems affect the practice of school management differently in a way which is consistent with the different positions of the models in the given framework. Hereafter the chapter discusses how the choice of management control strategy affects the local focus and practice in the two school systems. This is followed by an analysis of how the impact of the formula funding model design is not at least visible when it comes to the more adverse behavioral aspects. The chapter concludes with a discussion of how the devolvement of decision-making capabilities in both settings has especially been influential in affecting the managerial practice but also of how this practice comes to be influenced by political decision-making.

**Chapter 16** finally presents the conclusions and important findings which can be derived from this dissertation. This is done under the headings:

- Does design really matter?
- Balancing budgetary risk and the competitive pressure
- Special needs education and inclusion – what to do?
- Redesigns – if, how and when?





## Part I The context in which Danish school funding operates

**Part I** consists of three chapters and is built on the notion, that understanding the context in which a management control system operates is of vital importance when analyzing its' effects (Hopwood 1983). The purpose of Part I is to present and discuss relevant aspects associated with Danish school funding operates.

In **Chapter 2** the main legislative developments in an education context from 1970 up until today are analyzed. The core focus is on the continuous tension between centralization and decentralization which has characterized and affected the governance structures of the Danish education system. The chapter seeks to place this schism in a broader public governance perspective and discusses the effect of the legislative changes on local practice and managerial decision-making scope.

**Chapter 3** contributes to a deeper understanding of the context in which education funding operates by focusing on special needs education and its connection to managerial practice. The chapter analyzes how the notion and use of special needs education have evolved over time and discusses the effect of the division of budgetary responsibility in terms of use and level of expenditures used for these services.

**Chapter 4** reviews literature on formula funding models. In doing so, the chapter presents the general rationales behind, together with the advantages and disadvantages associated with distributing funds in accordance with a predetermined mathematical formula. The discussion focuses on the general aims associated with funding models, namely efficiency, equity and managerial accountability, while the more specific educational goals of the Danish school system are to be discussed later in connection with the two field studies.

All in all, **Part I** thus seek to equip the reader with relevant knowledge on the Danish school system in general, the legislative developments in particular and not at least the important connection between special needs education and budgetary responsibilities as well as present the allocation method applied in the context of school funding, namely that of formula funding.



## CHAPTER 2. THE DANISH ‘FOLKESKOLE’ – GOVERNANCE AND LEGISLATION

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### 2.1. INTRODUCTION

The public school – in Danish called the ‘Folkeskole’ – has an important role in the Danish society, with the vast majority of pupils enrolled here (82% for the school year 2012/13, Statistics Denmark). The importance of the public school system as a medium for educating future generations has placed it at the center of political attention and the activities and foundations upon which the school system is built have accordingly been in focus of much debate. According to the Danish constitution (chapter VIII, §76), all children in the age category to which mandatory schooling apply (6/7-16 years) are entitled to free education in school run and financed by the public (Education Act § 3). Since school attendance is not compulsory parents can choose freely between other types of teaching methods e.g. homeschooling, boarding schools and private or independent schooling, as long as accepted standards are met. Education, however, is compulsory, leaving the public school system to consist of a one-year pre-school class, nine grades and an optional 10<sup>th</sup> grade.

Over the years the core objectives of the public school system as prescribed by the preamble of the Education Act have remained more or less stable; namely a twofold aim of 1) *forming the individual pupil as a loyal, self- and community respecting individual*, and 2) *providing the pupils with the needed academic skills*. More precisely the preamble states that:

“The public school is, in corporation with the parents, to provide the students with the knowledge and skills that will prepare them for further education and training and instill in them the desire to learn more; familiarize them with the Danish culture and history; give them an understanding of other countries and cultures; contribute to their understanding of other; the interrelationship between human beings and the environment; and promote the well-rounded development of the individual pupil” (§ 1 The Education Act).

Albeit, successive governments have emphasized differently the two aims, this duality can be traced back to the school reform of 1934. Since the change of government in 2001 a number of initiatives stressing the academic purpose of the public school have been implemented. Together with a growing political demand for increased professionalism in school management these changes can be seen as a renewed emphasis placed on the part of the preamble emphasizing academic-skills (Ratner 2009). Today, the Education Act § 2, specifies that it is the Danish municipalities who are responsible for the organization and funding of the public school,

within a framework set up by laws, ordinances, rules and guidelines laid down by Ministry of Education. The distribution of responsibilities and tasks between the central government, municipalities, and schools has however changed considerably over time. In this way legislative changes have affected not only the governance but also the objectives and the organization of the school system. Evolving in a tension between decentralization and centralization these changes have affected the distribution of educational and financial responsibilities.

Understanding this legislative development, as suggested by Edwards *et al.* (1999), is the purpose of this chapter. This entails providing an analysis of the main legislation from 1970 until today; changes which have affected the division of tasks and responsibilities, and ultimately the organization and funding of the public school system. In doing so, the analysis will present the current governance structures of the public school system and discuss the broader changes in the context of a wider reform process; a process with the general aim to ‘modernize’ the governance of the public sectors, with the intentions of creating “re-regulated-self governance”. The changes relating to special needs education are only discussed on a general level thus leaving a more thorough discussion to Chapter 3.

## 2.2. LEGISLATION & (DE)CENTRALIZATION 1970 – MID 1980’S

The main legislative changes from 1970 - mid 1980’s are summarized in Table 2.1. The table depicts the main legislative changes and their effect on the responsibilities and level of decision-making authority given to the relevant governing body.

With the municipal reform of 1970 the municipalities are made financially responsible for the schools; a change which according to Pors (2011) marks the first wave of decentralization affecting the Danish governing structures. The devolvement of financial responsibility was accompanied by a change in state funding from mere reimbursement to the introduction of block grants. When the transition was completed in 1975 the full financial responsibility was transferred from the state to the municipalities (LGDK 1972:186)<sup>1</sup>. This meant that decision-making competences and financial responsibility were linked at the municipal level, thereby making the municipal funding independent of the activities undertaken. The municipalities as argued by Andersen *et al.* (2010) could as a result decide on the size and distribution of funds independently of any funding concerns which prior to the change could distort the decision making process. The change from reimbursements to block grants was seen as a mean to incentivize the municipalities to become more financial responsible in their use of funds.

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<sup>1</sup> From 1970-1975 the state covered 60% of the teachers’ salaries

<div style="display: flex; justify-content: space-between; align-items: center;"> <span>← Decentralization</span> <span>Centralization →</span> </div>				
Year	School commission	Municipal board	County	Ministry of Education
<b>1970</b>	<p>Responsible for pedagogical supervision of the school system in cooperation with school councils</p> <p>Develop the proposals for school- and curriculum plans</p>	<p>Made financially responsible for the schools</p> <p>The funding model of the municipalities was to be changed from reimbursements to block grants</p> <p>Responsible for amending school and curriculum plans</p>	<p>Role reduced; albeit still holding the overall inspection rights in terms of ensuring that the municipalities are respecting the law</p> <p>Responsible for special needs education</p> <p>Approves school- and curriculum plans, thereby making them entitled to information on school planning</p>	<p><b>Municipal reform</b></p> <p>The School Governing Act replaces the former School Supervision Act (Act no. 44).</p> <p>Legislation on the content of the public school is now only specified in the Education Act.</p> <p>Final approval of school- and curriculum plans are made here</p>
<b>1972</b>				9 years of education is made compulsory (Act no. 212)
<b>1973</b>				The duration of a lesson is reduced from 50 to 45 minutes
<b>1974</b>			The final approval of school- and curriculum plans is now to be made here and not in the ministry (Act.no.121)	
<b>1975</b>		<p>The change from reimbursements to block grants is final</p> <p>The individual municipality is given a degree of freedom in establishing electives (Act.no.312)</p>		<p><b>New Education Act:</b></p> <p>Introduction of an optional pre-school-class and a 10<sup>th</sup> grade</p> <p>Creation of a comprehensive, unified school, although divisions must occur in 8<sup>th</sup>-10<sup>th</sup> in all examination subjects except Danish</p> <p>Introduction of a final school examinations after both 9<sup>th</sup> and 10<sup>th</sup> grade (Act no. 312)</p>
<b>1977</b>	Regulation on the composition of school commissions and councils is amended (Act no. 656)			

1979		Instructed to establish pre-school classes (Act no.257)		
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- Table 2.1 Public school legislation and (de)centralization, 1970 – mid 1980s

With the reform, the municipalities also became responsible for the amendments of school- and curriculum plans. The content of these plans was described in the Education Act which also contained regulation on the content and scope of each subject, while the local development of the plans was conducted by the local school commissions; a locally elected governing body responsible for the pedagogical supervisions of schools<sup>2</sup>. The plans were subsequently send to the county and the Ministry of Education for final approval (the latter practice abolished in 1974) (UVM, sector analysis 2007:6). A counterpoint to these decentralization efforts was however the replacement of the former School Supervision Act in 1970with a new School Governing Act. This new act namely comprised detailed descriptions of how governance of the schools was to be conducted (UVM sector analysis 2007:5)

### 2.3. LEGISLATION & (DE)CENTRALIZATION MID 1980'S – 1992

From the mid 1980's the main actors of the education system changed. The period marked a change in governance from detailed regulation to management by objectives. As illustrated in Table 2.2 the period was characterized by greater devolvement of budgetary responsibilities to the municipalities. In 1989 the School Governing Act was abolished with all legal provisions regarding the governance of schools transferred to the Education Act (UVM, sector analysis 2007:6). The municipalities were given greater freedom to adjust budgets and to organize their school system in accordance with local needs. The principal role of the municipalities was emphasized in 1992/1993 where the full decision-making authority for hiring and firing school employees was transferred to the municipalities. This meant that prior state legislation on norms and dismissals was abolished and the negotiation right transferred from the Ministry of Finance to Local Government Denmark. The teachers in other words became municipal employees.

The decision-making scope at the school level was however also enhanced, as a range of tasks was devolved from the municipalities to the schools. The authority of the principal of school was strengthened, giving these the freedom to decide upon specific organizational matters (Ministry of Finance *et al.* 1995:91). Yet, the specific level of devolution of budgetary- and pedagogical responsibilities varied greatly

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<sup>2</sup> In 1970 a commission was comprised by six members chosen by the municipal board (three from the board itself) and five from the parental elected school councils

(Ministry of Finance *et al.* 1995:71; Pors 2011:109) and only a few schools were allowed to make carry-overs or to plan freely teaching hours across school years, subjects or groups (Buse & Smith 1999:274).

<div style="display: flex; justify-content: space-between; align-items: center;"> <span>Decentralization</span> <span>Centralization</span> </div>					
Year	School management	School board	Municipal board	County	Ministry of Education
1988			Legislation on school closures & class size is modified (Act no. 826)		
1989		School commissions and councils are abolished, replaced by school boards (§42) with competences delegated from the municipal board	Administrative rulings on complaints is placed at the municipal level (Act no. 348)		The School Governing Act is abolished & the remaining statutory provisions are transferred to the Education Act (Folkeskoleloven)
1990	Following the abolishment of school commissions their competences are devolved to the schools  A larger proportion of funds are devolved to schools as a mean to enhance local decision-making		Decision-making scope enhanced  Schools must now answer directly to the municipal board  The school director becomes a municipal director	Role further reduced in that their approval of school and curriculum plans is no longer a requirement.  Main focus; special needs education	Introduction of provisions on open enrollments (Act no. 435)
1992			Full decision-making competences for hiring and firing is transferred to the municipalities, thus abolishing prior legislation set by the ministry on norms and dismissals (Act no. 281)		

- Table 2.2 Public school legislation and (de)centralization, mid 1980s – 1992

The increased devolvement of budgetary- and pedagogical responsibilities reduced the role of the counties and school commissions. For the counties this entailed that

special needs education became their only responsibility. The coordinating function performed by school commissions was also made superfluous, and in 1989 they were replaced with local school boards with parental majority. The decision-making scope of the school boards was enhanced, giving them the ability to decide upon matters of principle for their own school. Implementation however remained the responsibility of the school management. The introduction of schools boards can, as noted by Pors (2011:111), be seen as an attempt to engage parents with the intention of creating service renewal and ensuring that these would not deselect the public school in favor of private solutions. In 1990 parental choice was further enhanced in that parents were allowed to choose alternative public schools in the municipality, if the particular school had extra capacity beyond the obligations to the pupils of its own district (Sørensen 1999:130).

## 2.4. LEGISLATION & (DE)CENTRALIZATION 1993 – 2000

Throughout the 1990's the tension between centralization and decentralization continued, see Table 3. Following a change in government in 1993 a new Education Act was passed. The Act introduced the concept of a 'comprehensive and unified school system'. This meant that the prior requirement for dividing older pupils into groups based on skills was abolished. Differentiation of teaching thereby became the new objective, replacing the prior idea of differentiation of pupils, and with it new interdisciplinary methods were introduced. Throughout the 1990's the Education Act was however amended 14 times. The changes primarily dealt with the integration and education of bilingual pupils, placing the responsibility for this at the municipal level (UVM, sector analysis 2007:6-7).

The new Act of 1993 enhanced the central control of the content and organization of the education. The Act enhanced the existing goal provisions for the education, introducing provisions for vital knowledge- and skills areas in each subject. The introduction of recommended curriculum-plans and study guidelines further contributed to a formalization of the content of the teaching given. The new Education Act however simultaneously emphasized that the individual schools held the full responsibility for pedagogical developments and for the organization and quality of the education provided (Ministry of Finance *et al.* 1995:73, 91). In this way, despite the enhanced central control in term of content the role of the municipalities was continuously emphasized, as underpinned in the 'budget analysis' published by the Ministry of Finance in 1995, which stated;

"The central actor of the public school system is the municipal board, who within the frame of the Education Act, determines the level of service...determines the specific level of devolvement of decision-making capabilities to school boards and local management, and decides upon the model of resource allocation" (Ministry of Finance *et al.* 1995:73)



The local municipal governance was to a great extent characterized by explicit goal setting, where the aim was to strengthen the connection between municipal policy decisions and the activities undertaken in the schools. The municipal decision-making scope was further widened following the transfer of tasks previously held by the counties. Including for example the referral right for special needs education (UVM, sector analysis 2007:7).

In the latter part of the 1990's growing concerns about the educational skills of the pupils however began to arise. This resulted in a national call for a stronger culture of education, and an increased demand for transparency in terms of service content, structures of governance and of the values guiding the delivery of public service. Evaluation was, as described by Pors (2011), increasingly seen as a vital lever for making quality visible.

<div style="display: flex; justify-content: space-between; align-items: center;"> <span>Decentralization</span> <span>Centralization</span> </div>					
Year	School management	School board	Municipal board	County	Ministry of Education
1993	The requirement to divide pupils in examination subjects in 8 <sup>th</sup> -10 <sup>th</sup> is abolished				<b>New Education Act</b> The existing goal provisions are enhanced, with binding objectives for central knowledge and skills areas for specific subjects and compulsory topics (the so called end-goals) (Act no. 509)  The number of teaching lessons in the pre-school is raised
1996			In order to improve bilingual pupil's reading skills municipalities are given the legal capacity to establish support services (Act no. 413). Obligated to offer Danish as a second language for all pupils (pre-school-10 <sup>th</sup> )		
1997		Pupils and teachers are given voting-rights and principals	Given right to establish 10 <sup>th</sup> grade schools (Act no. 472)		

		are allowed to participate in meetings			
<b>1998</b>			Municipalities must offer bilingual children, not yet attending school, support as to enhance their linguistic skills (Act no. 486)		
<b>1999</b>					Danish, English and Math is made compulsory in the 10 <sup>th</sup> grade (Act no. 406)
<b>2000</b>			The referral right for comprehensive special needs education is placed with the child's primary municipality (Act no. 458)	The rate paid by municipalities for special needs services is raised in order to create appropriate, clear divisions of tasks. A complaint board for comprehensive special education is established	Following the establishment of 'Center for Videregående Uddannelse (Center for Further education) the rules on teacher qualifications are changed (Act no. 482)

- Table 2.3 Public school legislation and (de)centralization, 1993 – mid 2000

## 2.5. LEGISLATION & (DE)CENTRALIZATION 2001 – 2011

The 2000s was characterized by pursuits of accountability, efficiency and transparency, as illustrated by the structural reform of 2007. This reform reduced the number of municipalities from 271 to 98 and the 12 counties were replaced with 5 regions. According to Pedersen (2008:27) the reform revolved around 3 main aspects; namely 1) the creation of larger, more viable and financial solid units which could open up for efficiency gains, 2) an increased emphasis on evaluation, monitoring and performance measurement and 3) a focus on transparency, competition and open enrollment and choice. In the context of public schools the use of detailed process control especially came to illustrate this larger motion toward accountability, efficiency and transparency.

The 2001 change in government in combination with the publication of mediocre PISA test' results in 2001 and 2004 (conducted in 2000 & 2003) fueled discussions on the public school and the educational standards of its pupils. The leadership and

inspection ability of the municipalities were brought into question and Local Government Denmark strongly encouraged the municipal boards to take a renewed interest in their school affairs; arguing for the necessity of assessing the governing practices in use (Pors 2011:130). Nationally, the call for quality and assessments brought with it the introduction of detailed process control and from 2001-2011 the Education Act was amended 28 times. Simultaneously, these amendments emphasized the role of the municipalities and increased central government control.

In 2006 *quality reports*, in which municipalities were required to state clear policy objectives for their school system and subsequent monitor its performance, were introduced. In 2009 the statute for the Danish municipalities was amended, instructing each municipality to develop *quality contracts*, through which the municipality was also to monitor and frame the developments of the quality of service given. The quality contracts contained quantifiable goals for each municipal service area and recommendations on how to fulfill these. The contracts thus framed the scope in which service suppliers (here the local school management) were to work, with their subsequent performance monitored and reported to the municipal board (Act. No.136 24<sup>th</sup> Feb. 2009)<sup>3</sup>. The quality reports and contracts underlined the crucial role of the municipalities. By requiring these to develop education policies, the political responsibility and role of the municipalities was emphasized (Hess *et al.* 2009). The structural reform further enhanced the municipal decision-making scope, in that, the full responsibility for the organizing and funding of the special needs education was transferred from the now dissolved counties to the municipalities.

Detailed process control was however also introduced at the school level. In 2006 Student Plans, describing the ability and developments of each pupil, at all grade levels, were made mandatory. The content of these plans was developed by the ministry and so was the new so-called 'Common Objectives'. This was a set of national binding objectives for the education system<sup>4</sup>, which was introduced with the intention of securing comparable, formalized teaching, so to ensure that all pupils acquire the needed knowledge and skills when reaching respectively the end of a specific form level and when concluding their overall program (Ministry of Education 2008). Together with the introduction of national testing, student plans

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<sup>3</sup> The requirement to develop quality contracts were abolished in 2012, as a mean to 'give way for increased focus on results rather than process requirements, with the intention of creating room for greater professional responsibility and innovation'. The amendment stated that this 'was to be seen as a part of broader strive for less state control, where regulation and control is replaced by trust and a focus on results' (consolidated act no.885.29<sup>th</sup> august 2012).

<sup>4</sup> The 'Common objectives are more precisely regulation and objectives for the central knowledge- and skills areas for subjects and compulsory topics (end objectives) and a set for specific form level for explicit subjects and topics (form levels objectives).

were understood as vital tools for evaluating the learning outcomes of the pupil. They were however also seen as important tools which would enable both schools and municipalities to take actions when needed, and facilitate better planning, taking into account the ability of the individual pupil.

During these years large agreements on other policy areas also affected the public school. These agreements further introduced new tools for control- and performance measurement. In 2004 the so-called ‘Reform for Placements’ required all municipalities to develop a “coherent children’s policy” to describe how the general education system will co-operate with the special needs services. By requiring a municipality to integrate its’ services and outline the frame and standards in which professional individuals were to conduct their work, the aim was to ensure that all children would be given equal opportunities (Anbringelsesreform 2004). The “Welfare Agreement” of 2006 further introduced vital performance measures for the school system. Here the most influential goal has shown itself to be that of ensuring that 95 % of a youth generation by 2015 must have accomplished further education (Velfærdsaftalen 2006).

<div style="display: flex; justify-content: space-between; align-items: center;"> <span>Decentralization</span> <span>Centralization</span> </div>				
Year	School management/school board	Municipal board	County	Ministry of Education
2002		The obligation for mother-tongue education is made optional		
2003	The possibility of the schools to divide pupils across classes, to use multiple teacher arrangements and for establishing coordinated inschooling is enhanced			<b>New Education Act</b> Common national objectives for education is introduced together with binding goals for specific classes and age groups (form objectives) and specification of minimum lessons for specific subject areas, and for the 1 <sup>th</sup> -3 <sup>th</sup> grade in Danish and Math. Specification of content for pre-schools and improved in-schooling. English is made compulsory from the 6 <sup>th</sup> grade and Biology is made an examination subject
2004		To improve linguistic stimulation of bilingual pupils, referral to other schools than the home-district is		Geography is made an examination subject (Act no. 870)

		made possible. (Act no. 360)		
<b>2005</b>				An 'open enrolment' clause allowing parents to enroll their child at any school of their choice (also outside the home-municipality) is introduced.  Number of lessons in Danish and History is raised (Act no. 393)
<b>2006</b>		Via quality reports municipalities are made responsible for the quality of the school system		Quality reports are made mandatory  Compulsory national testing with content prescribed by the ministry is introduced, and to be used in quality reports and student plans (Act no. 313)
<b>2007</b>		With the Counties being closed the municipalities are assigned full responsibility for organizing and funding special needs education	With the structural reform the counties are closed down	Introduction of early education guidance and bridge building between public schools and further education (Act no. 208)  Specification of the content and organization of the 10 <sup>th</sup> grade (Act no. 1195)
<b>2008</b>		Can decide on age-integrated in-schooling (pre-school-2 <sup>th</sup> ) and 'rolling school start'		10 years of education is made compulsory.  Specification of objectives and content descriptions for after-school care (Act No. 208)
<b>2009</b>		The responsibilities of these are further emphasized (Act.No. 353)		

- Table 2.4 Public school legislation and (de)centralization, 2001 – 2011

## 2.6. PRESENT GOVERNANCE STRUCTURES AND SCHOOL REFORM OF 2013

As shown, legislation has affected the distribution of responsibilities and the levels of influence among the ministry, the municipalities and the schools. Today the system is organized so that the Ministry of Education<sup>5</sup> provides the overall objectives and directions on the content and management of the school system. As clarified by §82 of the Danish Constitution the municipalities however has the right

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<sup>5</sup> From 2011-13 the ministry was named Ministry of Children & Education, hereafter it was once again re-named Ministry of Education

under state supervision to independently manage their affairs (as set by the Law). The municipalities are consequently responsible for the specific organization and funding of their school system and can decide upon the frame, objectives and the way in which funds are to be allocated to the school districts (as long as their actions do not contradict with the interests of the individual or the essential societal interests). The political responsibility is thus placed at the municipal level. This means that the specific structure and objectives of the local public school can differ across municipalities – also in terms of how many resources are to be spent on this service area. The municipalities thus constitute the main actor, and they are responsible for controlling the budgets of schools, the quality of education given, for initiating school development and for hiring and firing school management.

The school boards and local school management constitutes the furthest devolved level of governance. Whereas school boards are responsible for setting the objectives and frame of the individual school, §2 subsection 2 of the Education Act emphasizes, that the local school management is responsible for administrative and pedagogical developments (as set within the frame of the law and the decisions made by both the municipality and local school board). This means that the school management is responsible for the operations and performance of their school district, thereby being accountable to both the school- and municipal board. A range of managerial- and budgetary tasks and responsibilities has further been devolved to the schools, including for example administrative tasks such as staffing and budgets. The changes have overall meant that the school management has obtained a larger scope for action when it comes to prioritizing and decision-making.

Simultaneously with this enhanced discretion detailed control exercised by the municipalities and state has limited the local scope for discretion. This is illustrated in terms of the specific education content but also in terms of the decision-making scope actually given to the management. As for the content of teaching the individual school management must ensure the attainment of the ‘Common Objectives’ (i.e. both end and form level objectives, §10 subs.2 and 3 Education Act). Albeit only guiding in nature curriculum guidelines for both level and end-objectives have also been distributed by the Ministry of Education since 2009. The management must accordingly describe the content of lessons and the accomplishments of the objectives; descriptions which must be approved by the municipal board, thereby making them binding for the school (Ministry of Education 2008). The school management is thereby the accountable part who must ensure that the teaching, not only takes the needs and qualifications of the individual pupil into account, but also is organized so that it ensures that the goals as set by the ministry are met (Education Act § 18).

Detailed legislation further prescribes which subjects are to be taught and make recommendations for the number of lessons for each grade level for each subject with the Law further dictating a minimum number of lessons per week for the spe-

cific grade level (Education Act §16)<sup>6</sup>. The Education Act (§17) further prescribes that the statutory number of pupils per class at the start of a school year must not exceed 28 (in certain instances the municipal board is allowed to make exemptions, albeit the number of pupils must never exceed 30 per class).

Overall, the legislation has evolved in a tension between decentralization and centralization. On the one hand the legislation has identified the municipalities as the central actor while simultaneously introducing detailed process control, formalizing the governance and content of the education and teaching. Although a range of tasks has been devolved to the school level the local decision-making scope is thus heavily influenced by state and municipal control, leaving at times very little room for discretion. For the purpose of accountability, the local management must report, explain and justify how resources are spent and to what effect.

In 2013 the school system saw the passing of yet another school reform (Act no. 665). The objective of this reform was to respond to what was described as significant challenges facing the public school system. The academic standards of the pupils were especially at the center of attention, underlined by the fact that 15-17% of the pupils in 2012 left the public school without sufficient skills in reading and Math. The academic skills of both the weak and strong academically gifted children were not sufficiently met by the public school system and on top of this too many pupils were referred to special needs education. In order to counter these concerns three areas of focus were identified (Text of agreement 7 June 2013:2). Building on the premise that all pupils must realize their full potential, the focus areas were;

- *A longer and varied day of schooling with more and better teaching and learning*
- *Enhancement of the professional skills of the teachers, the pedagogical staff and the principals.*
- *Few and clear objectives and simplification of rules and regulations.*

In terms of the latter, the management by rules and processes are to be replaced with management by few, clear targets and knowledge of results. Overall these changes, it was argued, is to support the municipalities in their development of the quality in their public school sectors (Text of agreement 7 June 2013). Parallel with the reform work, a new working hour agreement for the teachers was negotiated. The collective bargaining process between the Danish Union of Teachers and LGDK resulted in a wide lockout of the teachers; a lock-out which was first ended after an intervention by the government. The subsequent national agreement changed the prior norms on teacher preparation time, the specification of a maxi-

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<sup>6</sup> Respectively 30 lessons per week for 0-3<sup>rd</sup> grade, 33 lessons for 4<sup>th</sup>-6<sup>th</sup> grade and 35 for 7<sup>th</sup>-9<sup>th</sup> grade (Text of agreement 7 June 2013:3)

mum of teaching lessons for teacher over the course of a year and the placement of working hours. The regulation which gave teachers over 60 the right to reduced working hours was further to be phased out, in return for an extraordinary rise in teacher salary. A teacher's working is now to take place within normal working hours, with the prior centrally specified norms abolished, and the full decision-making competence instead placed with the principal. The principal today thus holds the full decision-making power over the distribution of tasks. The governmental intervention and subsequent result was met with a great level of frustration and resistance from the part of the teachers who felt run over and disregarded.

The use of goal setting (e.g. the 95% objective of further education) means that very similar focuses are emphasized across the Danish municipalities (Mehlbye 2010:7); a tendency further underlined by the new school reform which specify and simplify the national 'Common Objectives', further introducing four operative result targets for the entire public school system (Text of agreement June 7<sup>th</sup> 2013:23):

- *at least 80 % of the pupils must be good at reading and Math in the national tests,*
- *the number of high performance pupils in Danish and Math must increase year by year*
- *the number of pupil with poor results in the national tests in reading and Math must reduce year by year,*
- *the well-being of pupils must increase.*

Together with the emphasis placed on national tests and other pupil achievement measurements, this illustrates the important role outcomes measures have assumed as tools for evaluating the successfulness and development of the educational system. The devolvement of decision-making capabilities have in this way brought with it new types of regulation, standardization, evaluation and monitoring, and in its wake sought to establish a new form of (self-) control.

## **2.7. "MODERNIZING GOVERNMENT" BY CREATING "REGULATED SELF-GOVERNANCE"**

The legislative development discussed above is neither particular for the Danish education system or the Danish public sector more broadly. In fact, Christensen & Lægreid (2007) argue, the changes in the Danish public sector are parts of a more broad reform process inspired by the New Public Management ideology; an ideology which advances a focus on efficiency, structural devolution, disaggregation, competition, management principle and the increased use of contracts.

New Public Management is somewhat of a hybrid, advocating for both decentralization (let the manager manage) and centralization (make the manager manage), making it a double-edge sword which prescribes more autonomy and more central



control (Hood 1991; Christensen & Lægveid 2001). In a similar manner Pedersen (2008:25) describes the Danish changes as government led changes which have emphasized the creation of strong political control, budget compliance and increased use of performance contracts and evaluation, simultaneously with an increased emphasis on self-governance, through the decentralization and establishment of viable, financial sound units, characterized by managerial professionalism and strategic freedom.

Under the term “modernization” of government (Broadbent & Guthrie 2008:152) similar developments have taken place in other countries, especially in Britain (see e.g. Ezzamel *et al.* 2008 for such discussions, Pedersen & Hartley 2008:327; Pors 2011). Here, as in Denmark, methods of controls have changed towards devolution, decentralization, accountability and increased central and state control. In the words of Baker (2009:58): *“reforms have moved beyond Thatcher’s market-managerialism toward a hybrid, modernising’ version of the NPM that combines market mechanisms with central control to achieve policy objectives”*. In the governance of education, he argues, this has resulted in an intense focus on school performance; with effectiveness defined and measured through annual tests and published on performance tables, opening up for the results being used to compare results and changes across years and schools (Baker 2009).

Devolvement and decentralization of decision-making is sought, with the intention of creating local accountability for results, but also as a mean to improve education quality, due to decisions being made closer to the users (Ouchi 2003; Hyndman 2008). In turn, municipal management time can be ‘freed-up’, giving these the opportunity to focus on wider strategic issues, making also way for a more motivated and responsible local management. Yet, in the fear that education standards will slip if too much decision-making competences are devolved, Ezzamel *et al.* (2008) note, performance management and its’ accompanying standards are introduced:

“a common trait with decentralization reforms is a parallel development of centralization of control (in that) the increasing emphasis on output orientation by way of performance measurement and performance audits may be seen as such instruments for retaining (or gaining) central control” (Ezzamel *et al.* 2008:3)

In the British public sector attempts to delegate responsibilities have especially been accompanied by strong central control (see Rose & Miller 1992; Dean 1999; Newman 2001; Baker 2009). A tendency which according to Rose (1996) has been clearly manifested in the governance models applied in the context of education. Here, decentralization has been the goal, with the hope of establishing independent, self-sustaining units. Simultaneously, central control has been strengthened through the implementation of centralized legislation and an increased use of qualitative performance measurement systems (Rose 1996). This tension was also discussed by

Levačić (2008) who studied the finance system guiding the English education system. Before 2002 the governance of education was characterized by a steadily devolvement of financial delegation to schools. In 2006/07 however, the introduction of centrally determined ‘dedicated schools grants’ meant a loss of local authority, in that, the former position stressing the appropriateness of ensuring that decisions on school funding remained with local authorities, was abandoned (Levačić 2008:230).

This dual tension has under the term “modernization” of government led to the development of extensive regimes of targets and performance measures (Hood 2006); changes which have affected the managerial practices but also the management accounting technologies used to control organizational activities. From a type of budget control based on a concern with inputs, performance management and accounting techniques are increasingly concerned with measuring whether outputs and outcomes are achieved (Lapsley 1999; Guthrie *et al.* 1999; Verbeeten 2008). Political accountability for the government has, in the words of Broadbent & Laughlin (2003), become managerial accountability for managers of public sector organization. Devolution of budgets and decentralization of decision-making is thereby used as a mean to make the management accountable – both for education and budgetary developments. A range of splits, Baker (2009:58) argues, have thus occurred between policy and implementation, between purchasers and providers and between the commissioning and delivery of services.

Regulation and control is still at the core, in fact “*In this mirror-image dynamic, Hood et al. (1999:1999) argue increased ‘freedom to manage’ in public services at one level is accompanied by regulation in the form of expanded arm’s length oversight, or a shift from one regulatory style to another, rather than the removal of regulation...*”. Layers of control are accordingly introduced (Clarke & Newman 1997) with the overall aim of creating ‘regulated self-governance’ (Pedersen 2008:25). This regulation is used as a form of indirect control in which public service organizations are given (or rather imposed) the freedom to organize their operations while simultaneously being urged or bound to evaluate their performance and exert a type of reflective self-control (Dean 2006; Pedersen 2008:36). Accountability and calculative practices have thus been linked in order to create the ‘responsible and calculating individual’ as proposed by Miller (2001:380). An individual who ‘*acts freely, yet in accordance with the specified economic norms*’ (Miller 2001:380). In the pursuit of reflective self-control, achieving both education and budgetary objectives, the school management is thus made responsible for and given the freedom to spend resources and to balance the field of tension created by potentially conflicting demands.

## CHAPTER 3. SPECIAL NEEDS EDUCATION, INCLUSION & BUDGETS

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### 3.1. INTRODUCTION

The Education Act prescribes that the education environment of the public school must be orchestrated so that it to the greatest possible extent ensures that each individual child can remain and benefit from being taught in the general/mainstream environment. If the needs of a particular child are so demanding that the general environment is insufficient in meeting these needs the child is entitled to special needs education (§2. subs.2). Yet, being entitled to such special needs services however does not mean that the general provisions regarding aims, curriculum, and exams ect. do not apply. Pupils with special needs are thus in principle met with the same expectations as any other pupil.

Over the years the use of special needs education, its effects and with it the cost of such services has been a recurring subject on the Danish political agenda. In an international perspective, rising costs, concerns over efficiency and over the incentive structures created by funding models are identified by Parrish (2002) as the main motivations behind special needs reforms (see e.g. Sigafoos *et al.* 2010). As the following chapter will show, such concerns were also very present in driving the Danish changes. Reflected for example in the 2012' redefinition and demarcation of what constitutes special education. From a Statute which prescribed that:

“Special needs education and other special pedagogical assistance must be provided to those pupils whose development requires special consideration or support, which cannot be helped solely through the use of group-oriented- or differentiated teaching methods within the frames of the general education.” (Ministry of Education 2010 Act no. 885)

the new amended Statute stressed, that:

“Special needs education and other special educational assistance is provided to pupils in special classes or schools. Special educational assistance is furthermore provided to pupils if their continued education in their home class requires additional support for more than 9 clock-hours per week.” (Ministry of Children & Education 2012b Act no. 379)

Special needs education given less than 9 clock-hours/12 lessons per week was thus abolished. This was a part of a greater effort to make the public school system more inclusive, thereby countering the growing separation of the system into two separate, parallel school systems – the general public school system and a segregated

system for pupils referred to and placed in special needs services (Scjerbeck *et al.* 2013).

The chapter will outline the importance of studying special needs education in the context of funding, focusing especially on the consequences associated with the division of financial responsibility. In doing so, it will analyze how the notion of special needs education has evolved over time. Before however, the next section presents some of the Danish research on the use of special needs education. This is included because the long-term effect of segregated special needs education has become one of the main motivations for seeking a more inclusive system.

### 3.2. INCLUSION & DANISH RESEARCH INTO THE EFFECT OF SPECIAL NEEDS EDUCATION

Once rarely disputed the use and effects of special needs education is increasingly questioned (Tomlinson 1987:33-41; Thomas & Loxley 2001; Reid 2005:180), and indeed substituted by a wish for inclusion. ‘Inclusion’ is here to be understood as a break with the earlier “paradigm of integration”; a paradigm which according to Alenkær (2009) is associated with “special needs education” and the marginalization of particular pupils. Inclusion encompasses much more than retaining pupils with special needs within the frame of the mainstream school. Initiating instead a thorough rethinking of the concept of “special needs” and a questioning of the particular problem-solution constellation associated with ‘practices of integration’ (Ratner 2012:21). With ‘integration’ the “needs,” and problems are located within the pupil, and a diagnosis of for example ADHD may be followed by interventions which seeks to remedy the related needs and, if possible, re-integrate the pupil in the general school. An inclusive approach transforms this, focusing instead on the practices and traditions of the school (Alenkær 2009). From an understanding where the focus is on making the pupil fit existing practices, the focus is now instead directed upon changing the practices to the benefit of all children.

The effect of special needs education has been recurrently studied. The evidence however is scattered and based mainly on qualitative case studies, or limited quantitative datasets. Table 3.1 summarizes some of the newer Danish findings.

Authors	Research approach and objective	General findings
<b>Dyssegaard <i>et al.</i> (2007)</b>	Qualitative study of 11 schools and their organization of special needs education for pupils with less comprehensive needs	Schools were motivated to include pupils; albeit no clear guidelines existed for when a pupil was referred to special needs education  The schools struggled with documenting the effects of the special needs services given.
<b>The Danish</b>	An evaluation of the	The schools had a high level of activity when it came to special

<p><b>Evaluation Institute (EVA 2007)</b></p>	<p>special educational efforts given to pupils in the general environment in 6 schools in different municipalities.</p> <p>Studied the types of services given, and their related effect on the quality of the general education supplied.</p>	<p>needs education and assistance, albeit the demarcation between special needs education, assistance and the general education was found to be fluid.</p> <p>The resources for special educational assistance were mostly directed towards ‘early intervention’ in the in-schooling, especially in relation to reading efforts. Being primarily given in the early grades meant that it was difficult to separate the specific support from the use of alternative teaching methods.</p> <p>The teachers ascribed the increased demand for including ‘problem children’ in the general environment to an increase in pupils suffering from social and emotional difficulties.</p> <p>Despite early interventions the support was however over the long haul often inadequate in preparing the pupils for and enabling them to keep up with the education given.</p> <p>The teachers argued there to be a lack of consistency between the objectives and strategies set by the municipality, and actual options available for the schools.</p>
<p><b>Egelund &amp; Tetler (2009)</b></p>	<p>Building on respectively a limited data set of 95 pupils attending the 3<sup>rd</sup> – 6<sup>th</sup> grade in 4 schools, and 26 pupils receiving comprehensive special needs education in special needs classes, schools or in the home-school, this study had a twofold aim.</p> <p>The first was to document the effects of special needs education given to pupils in the general environment.</p> <p>The second, to describe the efforts given to pupils with severe difficulties.</p>	<p>The teachers experienced a positive effect of the special needs education given to pupils with special needs. The effect was argued to be greatest for pupils with learning disabilities and lowest for pupils diagnosed with behavioral difficulties. The pupil’s perception of the educational benefit was however different. 25% of the pupils had a negative perception of the educational effects of the special needs education given.</p> <p>The parents felt that the schools were taking good care of pupils with disabilities, ensuring that they, retained confidence, self-esteem and were thriving. The academic level however was found to be lacking, compared to the general school and the segregated nature of the education contributes to isolating the pupils from other children.</p> <p>The pupils’ perception of the educational work in the special needs services was good. They felt accepted, socially and educationally, albeit they at times felt they had no say or influence on their situation. This was especially apparent for children receiving comprehensive special needs education in the home-school.</p> <p>The teachers on the other hand felt they were lacking formal qualifications in terms of special educational support and they especially sought more practice-oriented supervision.</p>
<p><b>Capacent (2009)</b></p>	<p>Random sample of pupils with handicaps born in 1990</p> <p>Studied the transition of pupils with handicaps from the public school into further education</p>	<p>A vital precondition for pupils finishing further education was found to be that the pupils took part in the final school examination in 9<sup>th</sup> grade. Only approximately 64% of the pupils diagnosed with handicaps however participated in the finals (with lower grades than non-handicapped pupils).</p> <p>The study concluded that being enrolled in special needs classes or schools, reduced the likelihood of completing further education, compared to having received other types of special needs educational assistance in the general environment.</p>

<b>Mehlbye (2009)</b>	Studying the long-term effects of special needs education, the further education patterns of 128 pupils diagnosed with different disabilities and enrolled in special needs classes or schools were studied	<p>Special needs classes and schools did not adequately prepared pupils for further education, especially in reading and Math. The pupils still continued into various educational offers immediately after the 9<sup>th</sup> grade. The majority at lower-secondary-level boarding schools, folk high schools or in production colleges (57 %). 13 % continued into ordinary further education while 6% entered into work-experience-programs or other types of social arrangements.</p> <p>In the long run however, the picture was somewhat different. The number of pupils enrolled at production colleges, in work experience programs or who worked as apprentices, increased. 20 % had found a job, while 17% were not engaged in any type of further education.</p> <p>The study concluded that the first years after the completion of the public school were often very turbulent, resulting in an unstable progression into further education. The once who did the best, had the mildest problems and close, persistent support from an adult.</p>
<b>Steensgaard &amp; Hallberg (2010)</b>	<p>Survey study (not a representative dataset, response rate 33%),</p> <p>Analyzed the educational level and participation rate of pupils in special needs classes and schools in the final exams</p>	<p>These segregated services did only to a limited degree prepare the pupils for the final examinations. Likewise not all otherwise compulsory subjects were offered.</p> <p>Only 4% of the pupils participated in all compulsory examinations. 23% received fewer lessons per week than pupils in the mainstream system, 73% received the same, or more (4%).</p> <p>The teachers expressed the need for deeper, more expert knowledge on special needs education to be established.</p>
<b>The Danish Evaluation Institute (EVA 2013)</b>	<p>A survey (and 5 case studies).</p> <p>Studied how schools with special needs classes worked with inclusion</p>	<p>The general perception was that the existence of special needs classes in the school strengthened the ability to create inclusive educational environments. The close proximity to the general environment promoted cooperation, and the competences of the special needs teachers could more easily be used in the mainstream education as well (although it still could be improved).</p> <p>Pupils with special needs profited educationally and socially from being a part of the general environment, although their presence challenged the teaching was to be organized and orchestrated.</p> <p>Reintegrating special needs pupils in the general environment is not a guarantee for inclusion. More precise, inclusion is a complicated process, requiring both social and academic benefits; physical presence is not sufficient to be termed inclusion.</p> <p>The practices of re-inclusion were different across the schools. Half of the pupils were placed in mainstream classes on full time; the other half primarily participated in specific subjects.</p>

- Table 3.1 Danish research findings on the effects of special needs education

Albeit the research evidence is scattered, the findings indicate that being enrolled in for example a special needs classes or schools may be a good thing socially. But from an education point of view it may also be somewhat troublesome.

### 3.3. SPECIAL NEEDS EDUCATION 1970 – 2007

The focus on special needs education and inclusion is by no means new. In an international context the term ‘special needs education’ can be traced back to an inquiry on special education conducted in England in 1978 (Warnoch report). Next the use and approach to special needs education in Denmark will be discussed.

#### 3.3.1. 1970 – MID 1980’S

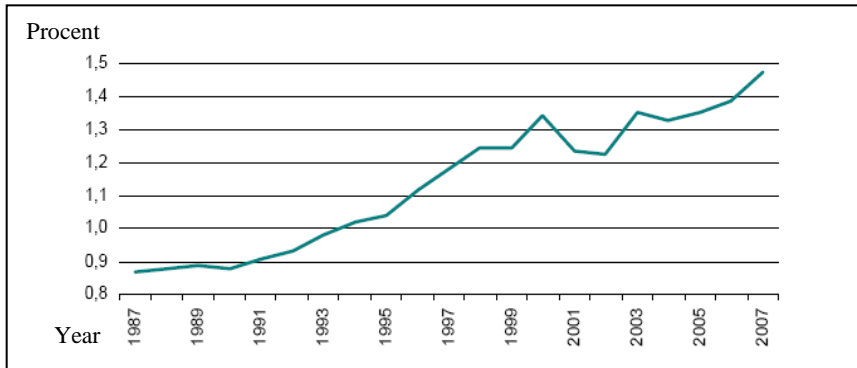
The structural reform of 1970 brought about a change of attitude towards children with special needs. From focusing on the deficiencies of the child thereby primarily considering pupils diagnosed with physical handicaps, the notion of special needs began to deal with and stem from a pedagogical concern. The social and psychological functions of the child thus became the focus of attention, and special needs education consequently viewed as a mean to respond to and redeem the negative consequences of the particular child’s needs. This conceptual change was accompanied by an increase in referrals to special needs education, both within the frame of the general system, in observation classes and in segregated special day schools (Ministry of Finance 2010:39-40).

Throughout the 1980’s different approaches, to special needs education emerged. This included “individual integration” of pupils with special needs, which allowed for example children with Down’s syndrome to be part of the mainstream environment (Ministry of Education 2003:14). Attempts were further made to reorganize special needs schools placing them as special needs classes in the general environment. These new practices brought about a raise in the general knowledge about special needs children. Yet, despite the general view that special needs education was only to be a temporary service, with pupils being reintegrated in the mainstream environment again after shorter periods of time, a survey conducted by the Ministry of Education in 1989 revealed an extensive use of special needs education. The survey showed that in the school years 1984/85 to 1986/87, 80 to 83 thousand pupils were referred to some sort of special needs education, either in their home-school, in special classes, or in special schools (Ministry of Education 1989). In other words, roughly 12-13% of all pupils in the public school system received some sort of special needs education (Ministry of Finance 2010:43).

#### 3.3.2. MID 1980’S – 2007

Except for a small drop (1%) in 1986/87 the use of the comprehensive special needs education continued to rise, as depicted in Figure 3.1. The vast part of special needs education however still took place in the general school environment (67%). However, from 1984/85 to 1994/95 the percentages of pupils receiving all types of special needs education rose from 12.6% to 13.3% (Ministry of Education 1997; Ministry of Finance 2010:45). This occurred despite continuous concerns and political emphasis placed on the importance of retaining children in the general system.

Examples of such inclusive-seeking initiatives were the campaign *A School for All* initiated in 1990/91 (a collaboration between the Ministry of Education, LGDK and the Danish Union of teachers), a new statutory for special education introduced in 1990 stressing the importance of teaching methods supporting the retention of pupils in the general system (Ratner 2012:137), and finally the Danish accession of the UNESCO Salamanca Statement in 1994 which acknowledged “to be included” as a human right.



- Figure 3.1 Number of pupils (age 6-16) receiving comprehensive special education, 1987-2007. **Source:** UNI•Statistik & Analyse, 14. January 2008:16.

The actual division of financial responsibilities combined with the relative low rates set by the counties and paid by the municipalities when referring pupils to the comprehensive special needs services, was especially important (Ministry of Finance 2010:46). The low rates in a sense incentivized municipalities to refer pupils to these services, as the cost of referral was much lower compared to establishing special needs classes. The type of pupils referred to these services also changed, with special needs education increasingly given to children diagnosed with social and emotional difficulties (EVA 2009:17); more precisely, a 7% increase (from 11%-18%) (Ministry of Education 1997).

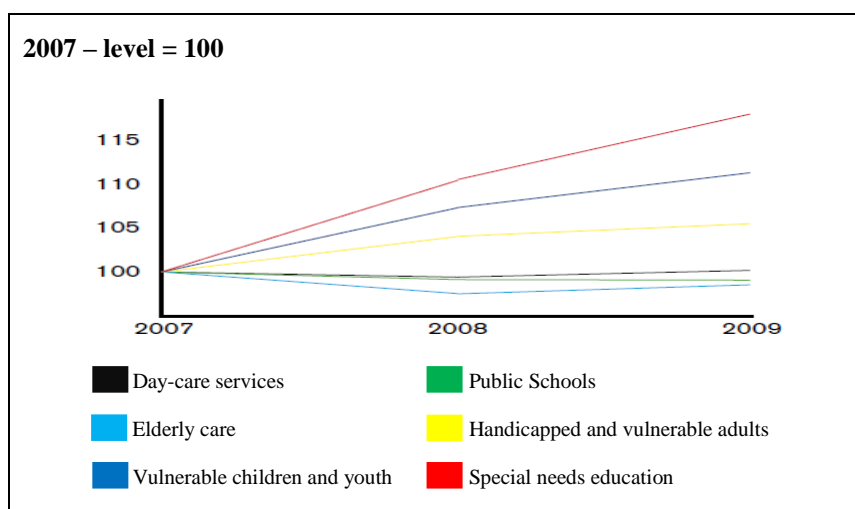
In 2000, in an effort to reduce the continuous increase in use of the segregated special needs services, the rates paid by the municipalities were raised. This was accompanied by a renewed focus on the importance of placing these services in close connection to the local environment (Ratner 2010:142). As seen in Figure 3.2 these efforts coincided with a drop in the referral rate; a decline which may indicate that financial considerations did indeed play a role for the municipalities when deciding whether to refer a child or not. In 2003 an evaluation conducted by The Danish Evaluation Institute (EVA) similarly indicated that the needs of the children were not the only factor which determined where a child was to receive its education; financial considerations and incentives, it was argued, were also present (EVA 2003:22).



The 2000' drop however only lasted for about a year and two years later the use again reached the 1999' level. Now however 29% of the pupils receiving comprehensive special needs education were diagnosed with socio and emotional difficulties (EVA 2003:23). Overall, during the period 1994/95 - 2004/05 the referrals to comprehensive special needs education rose 57% (Ministry of Education 2006). Accordingly, despite attempts to limit the use of comprehensive special needs education, the opposite happened. The actual practices and referral pattern however varied greatly across the municipalities and counties. No uniform approach existed for determining the type of pupils and the context in which the different needs should be met. One thing was however clear, the continuous increase in use of comprehensive special needs education, had great effects on the counties' budgets. From 2002-2006 the total gross expenses increased 20%.

### 3.4. SPECIAL NEEDS EDUCATION FOLLOWING THE STRUCTURAL REFORM OF 2007

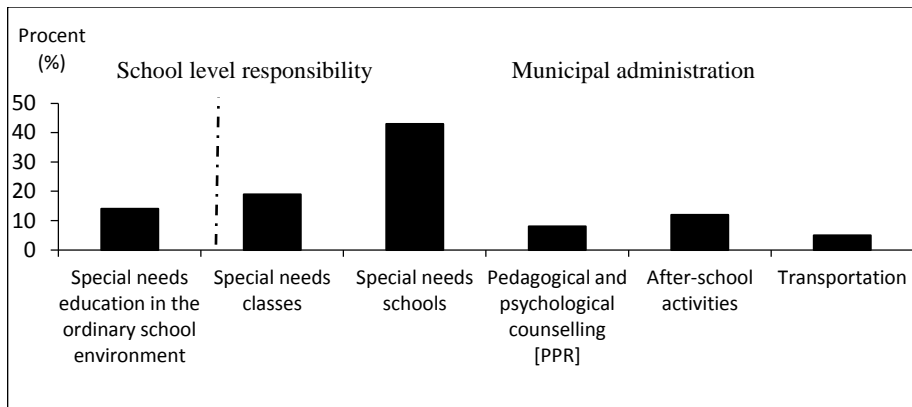
With the structural reform of 2007 the counties were dismantled. Thus, the full responsibilities, both financial and organizational for all special needs services within and outside the frame of the general environment were transferred to the municipalities. The structural reform meant the amalgamation of previously independent municipalities and with it the clash of different practices. New practices thus had to be established. The trend however was that the municipal expenditure on supplying special needs services increased heavily and approximately 84.000 pupils (14.3% of all public school pupils in the age 6-16) were now receiving some sort of special needs education (Ministry of Finance 2010:13).



- Figure 3.2 Municipal spending 2007-2009. *Source:* Kudahl. *Momentum*, nr. 3/2010, 16. Marts

From 2007-2009 the cost of special needs services rose 18% (see Figure 3.2, Kudahl 2010). In the school year 2008/09 the total amount spent on special needs education amounted to 9.68 billion Danish Kroner, corresponding to a net extra cost of 7.94 billion DDK. That is 23.9% and 19.6% of the total expenditure on the school system) (Ministry of Finance 2010:14).

The growing budgetary concerns associated with special needs education and the extensive use of it, once more triggered the debate over how special needs education was given. This culminated and was documented in the report on the use and funding of special needs education conducted by Local Government Denmark and the Ministry of Finance in 2010 (Deloitte 2010/Ministry of Finance *et al.* 2010). In addition to a general analysis of the activities and resources used in the Danish public school system, the report studied the practices and funding models of 12 municipalities. The report revealed an interesting pattern; the redistribution of tasks following the closing of the counties, had in general not been accompanied by a devolvement of budgetary responsibilities from the municipal administrations to the schools. The funding models were in general centralized placing the budgetary responsibility for special needs classes and schools with the municipal administration (who often held the full responsibility for pedagogical and psychological counselling (in Danish called PPR), and for the cost of transportation of pupils from home to the special needs services). Thus the schools were only financial responsible for a very limited part of the special needs services, as illustrated in Figure 3.2.

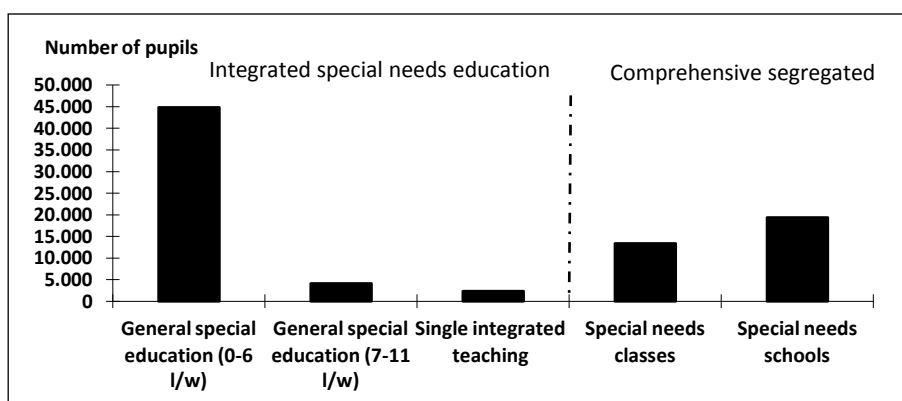


- Figure 3.3 Special needs education expenditure in total, distributed across line items (%), 2008/2009. **Source:** Adapted from the table in Deloitte 2010:26

As seen the distribution of responsibilities meant that, 86% of all expenditure in the school year 2008/09, were defrayed by the municipal administration. 62% of these went to cover the cost of the comprehensive services, special needs classes (19%) and schools (43%) (Deloitte 2010:26). Thus, leaving the remaining 14% at the responsibility of the school management (i.e. special needs education given in the

general school environment). This division of responsibilities meant that the individual school often incurred no expenses or additional costs when a child was referred to the comprehensive special needs services. Integrated special needs services within the frame of the mainstream general education, on the other hand, was associated with considerable local budgetary effects. The report thus indicated that the increased use of the comprehensive, segregated services was due to the relative high cost incurred by a school when seeking inclusion compared to the “cost free” alternative of segregation (Ministry of Finance 2010:25).

It was further documented that an inappropriate pattern had emerged, in that, special needs education was either given in limited doses (0-6 lessons/week) or in comprehensive segregated services. Figure 3.4 depicts this distribution across the then 5 types of special needs education categories. As shown in the figure, not much effort was spend on establishing more extensive inclusive-seeking services. Implying an autonomic increase in the number of pupils referred to the comprehensive, segregated services (special needs classes and schools). This skew pattern affected greatly the municipal budgets. In 2009, 9 out of 10 municipalities incurred budget overruns in relation to children with special needs (20% exceeded their budgets more than 25%) (Houlberg 2010).

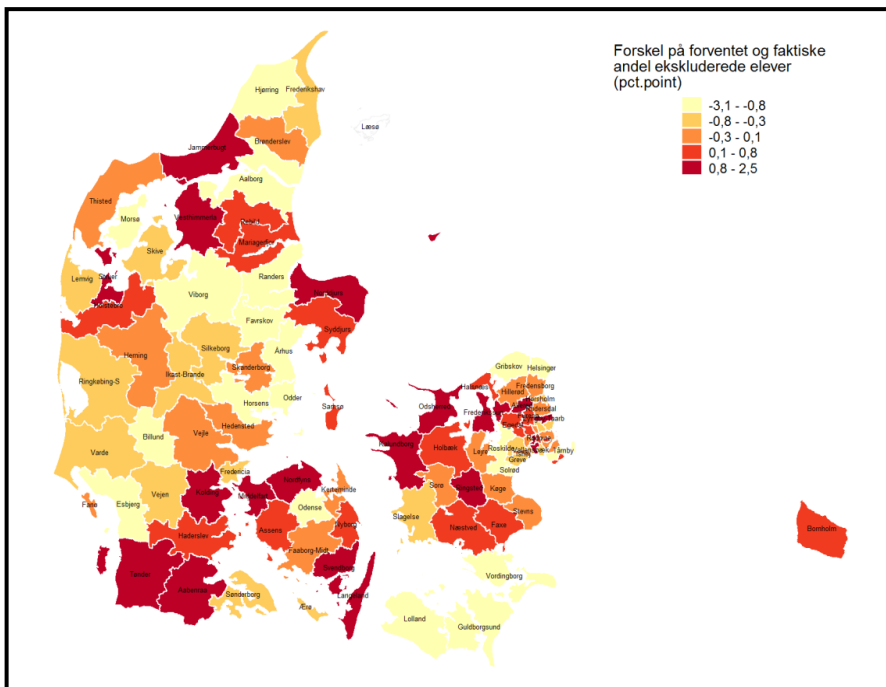


- Figure 3.4 Pupils receiving special needs education, distributed across the different categories, 2008/09. **Source:** Adapted from Ministry of Finance: 2010:13.

Furthermore, the report showed that special needs education given in the general public school was addressed to pupils with reading and writing difficulties. Many municipalities had namely implemented formal procedures and programs for reading in the in-schooling. A considerable part of the children however had more general learning difficulties ascribed to e.g. ‘delayed intellectual development’. A referral to a special needs school, however could be caused by a variety of reasons, and did thus not only pertain to pupils with diagnosed general learning disabilities. No clear or uniform practice existed in terms of which problems were to be handled

within the frames of the general system, or for when the pupil was to be referred to a special needs school (Ministry of Finance 2010:16).

Similarly, the existence of varying practices was also shown in the survey conducted by KREVI in 2011 (Bækgaard & Jakobsen 2011). The survey compared the actual level of referral in 2009 with the expected level when taking into account socio-demographic factors and the number of private schools. The referral rate to special needs classes or schools ranged from 2.5% to 10.5% of the pupils (if disregarding the small island municipalities such as Læsø), but when adjusting for the socio-demographic factors and the number of private schools, the result was somewhat different. As summarized in Map 3.1 some municipalities referred 2.5 percentage point more pupils as expected, while others referred up to 3.1 percentage point less (Bækgaard & Jakobsen 2011:2). The darker the color illustrates municipalities with a higher than expected referral rate, while the lighter colors depict municipalities with a lower than expected level of referrals. Although it was argued that the results could not be used to conclude whether the individual municipality had the “correct” level of referrals, the results at least indicated that different referral practices existed. Caused by, it was argued, the different applied funding model *vis a vis* the distribution of financial responsibilities (Bækgaard & Jakobsen 2011:31-34).



- Map 3.1 Difference between actual and expected proportion of segregated pupils (percentage point) in 2009. **Source:** Bækgaard & Jakobsen 2011: 32

### 3.4.1. LEGISLATIVE AMENDMENT & RECOMMENDATIONS TO ALTER FUNDING MODELS

The growing public spending associated with special needs education and the skewed pattern of use, once more sparked discussions about the prevalence, placement and use of special needs education. The taskforce behind the Ministry of Finance' study (2010) suggested that the demarcation of what constituted special needs education needed to be altered. The new definition, it was emphasized, should more clearly express the delimitation of special needs education. The taskforce further recommended a range of other changes to take place in the municipalities: The local pedagogical and psychological counseling services (PPR) needed revision in order to make them more demand oriented. A renewed focus on the development of the competences of the teachers was needed and most importantly the local funding models should be changed so that they would support the objective of inclusion. The latter, the report suggested, could be done by incorporating inclusive-enhancing incentives into the models (Ministry of Finance 2010:20ff.).

In 2012 the definition of what constitutes special needs education was altered, once again underlying the importance of orchestrating the teaching so that it to the greatest possible extent ensures that the individual child can remain and benefit from being taught in the general environment. As already mentioned in the introduction the new demarcation entailed that "special needs education" now only takes place in *special needs classes* which are placed and administrated within the frame of the general public school system, in *special needs schools* (completely segregated education taking place outside the general environment) or as *single-integrated* special needs education given in a mainstream class when a child needs more than 12 lessons of support per week (Ministry of Children & Education 2012a, chapter 3:2, Act no. 379, 28.04.2012).

The Education Act still emphasizes the right of a pupil to receive education which takes into account the pupil's individual needs. Accordingly, if differentiation of teaching, group formations, two-teacher arrangements or teaching assistance is not sufficient, the pupil must be given additional help, in the form of supplementary teaching or other types of support and personal assistance. Amounting to less than 12 lessons per week, this is however *not* characterized as special needs education.

The overall objective of the amendment was to ensure that special needs education to the most possible extent is provided in the general system and in the immediate home-environment of the child (Ministry of Children & Education 2012a: chapter 2:1). On top of this, local flexibility in terms of creating flexible and inclusive services was to be enhanced. By abolishing the term, 'special needs education less than 12 lessons/week', official referrals or diagnosis are no longer needed in order to facilitate and start inclusive-seeking support. The prior need for special examination (usually conducted by special needs schools or the PPR) was thereby superfluous.

ous and not a precondition for help to start. By eliminating the link between diagnoses, support and funding the hope was that the potential link between funding and local decision-making on disabilities would be removed. The amendment was not accompanied by additional funds. A vital assumption for local success, the ministry stressed, was that the municipalities would not lower their spending. Resources should be retained in the system; albeit distributed according to different patterns – to the benefit of not only the individual pupil but to the school system as a whole.

The renewed pursuit of inclusion has also been on the top of the agenda in the yearly agreements between the Government and LGDK. Since 2011 these agreements has contained an ongoing focus on the importance of making the public school more inclusive. In 2013 three objectives for the public school system in terms of inclusion were agreed upon. It was accepted that sustaining the well-being of children was especially important and an indicator of the successfulness of the inclusion efforts (LGDK 2013). More precisely the three objectives were formulated as:

- *by 2015 the number of pupils included in the general education must increase from 94.4% to 96.0%.*
- *by 2015, and even further by 2018, the proportion of pupils receiving the grade 2 or less in reading, spelling and Math at their final examination must be reduced.*
- *Inclusion must not come at the expense of the well-being of the children*

### **3.5. BUDGETARY RESPONSIBILITY AND THE USE OF SPECIAL NEEDS EDUCATION**

The above chapter has shown how the use and understanding of special needs education has evolved with the chapter further trying to capture the important motivation factors behind the renewed interest and pursuit for inclusion. Questions on the documented effects of special needs education, together with the prevalent use and associated cost of special needs services have here been identified as factors which once again have brought about questions on the appropriateness and efficiency of so many pupils receiving some sort of special needs education.

The distribution of budget responsibility, whether between the counties and municipalities or the municipal administration and schools has further been a recurring theme throughout the chapter. This separation of responsibility between special and general funding is interesting, but not unique for the Danish public school system. As discussed by Moore-Brown (2001) and Sigafoss *et al.* (2010) special needs funding is often separated from the remaining school budgets. As shown by Hartman (2001) and Horn & Tynan (2001) this can be problematic, in that, the related effect is that the level of spending for these services tends to increase. This has led Sigafoss *et al.* (2010) to conclude that there is a relationship between the propensity to refer a pupil and the financial burden incurred. This tendency is especially im-

portant when looking at the type of pupil being referred to special needs services. As in Denmark studies have shown that special needs education increasingly is given to children diagnosed with social and emotional difficulties. This is interesting, as the criteria's for diagnosing these difficulties, as noted by Reschly (1996), are not always clearly or consistently applied. Low achieving pupils might as a result be classified as learning-disabled in order for them to be qualified for special education funding (Horn & Tynan 2001; Sigafoss *et al.* 2010).

There is in the literature on funding of special educational needs great disagreement on whether funding should be allocated to pupils based on identified needs (case payments) or through resourcing schools using block grants based on a range of criteria (capitation payments) (Ferrier *et al.* 2007). While Chapter 4 in this dissertation presents more in depth the difference between case and capitation funding the main characteristics of the two approaches can be described accordingly; The first type of funding sometimes referred to as input-based, demand-driven or categorical funding allocates individual funding to specific pupils depending on the severity of needs of that pupil. This type of funding is according to Banks *et al.* (2015:3) often associated with systems with a high proportion of children in segregated settings, with funds often tied to individual pupils or provided to parents who, in principle, are able to choose where they want to have their child educated. In this way, such individual budgets 'guarantee' that pupils receive the resources they were assigned with the mode of payment putting "*purchasing power in the hands of the parents*" (Lamp 2009). On the other hand, this type of payment can threaten the ability to create inclusive practices, in that, it encourages labeling, promotion or even a rewarding of the segregation of pupils with special educational needs. Thwarting so to say the core purpose of assessment turning it potentially into a process characterized by 'diagnosis for dollars' or 'bounty hunting' (Banks *et al.* 2015). Further, bringing about the criticism that this disability categorization locates the problem within the child, conceptualizing it as a deficit or defect within the individual child (Topping & Maloney 2005)

The other type of funding, often referred to as 'through-put' or 'supply-driven funding', allocates funding to municipalities, regions or schools via a lump sum and is considered to be more institutionally based with less emphasis on the individual child (Mittler 2000). The method is often census-based with funding allotted based on for example the number of pupils with certain weighted characteristics e.g. socio-economic status, gender or the type and degree of disability. Although it undoubtedly gives schools flexibility this type of funding has been criticized as leading to inertia amongst school personnel because regardless of management actions, the funding will be provided. Questioning further the level of accountability created, in that, it can be difficult to track the funds and thereby ensure that they are actually used in relation to the children for who additional resources were intended (Meijer 1999; Riddell *et al.* 2006). Lastly, the fixed budgets may also decrease the

local incentive to enroll pupils with special educational needs as the school will face the cost of providing resources to these pupils (Crawford *et al.* 2011).

In this context Dhuey & Lipscomb (2009) studied how different payment methods affect the use of special needs education. Here, they showed how the implementation of a ‘state capitation reform’ affected the disability- and placement rates. The new capitation funding model lowered disability rates; a result which the authors noted indicated that tying funds to the individual pupil affected ‘negatively’ how special needs education was given. Capitation funding removed the link between funding and local decision-making over disability identification and placement which meant that the prior propensity of schools to provide special needs education services as a mean to be compensated for the extra costs decreased. Importantly, Dhuey & Lipscomb (2009) showed that this prior relationship was especially prevalent when it came to the more “subjectively” diagnoses categories (specific learning disabilities and mental retardation)<sup>7</sup>. This corresponds closely to the argument put forward by Marsh (1998:121) that *“an allocation system which provides additional resources to any pupil who can be certified or measured as meeting the criterion for additional resources provides an incentive for parents and the school to secure the necessary identification for that pupil”*. With the result that such system over time will be likely to generate an increase in the number of pupil eligible for extra funding.

Overall, the study of Dhuey & Lipscomb (2009) showed how the capitation reform led to an immediate decline in the rate of less severe ‘disability diagnoses’, while there was a lagged response in regards to the more severe categories. The change in funding however affected the rate of outside school placement for pupils with severe disabilities; a tendency, the authors argued, reflected an incentive-based response since these services became more cost minimizing on the margin than providing services in-house (Dhuey & Lipscomb 2009:4).

In a Danish context, Bækgaard & Jakobsen (2011) also showed that the distribution of budgetary responsibility had an impact on the likelihood of a child being referred to segregated special needs services. It was shown that when schools covered the full or a substantial part of the payment for special needs education, the proportion of pupils receiving segregated special needs education was lower compared to municipalities where the funds were kept and paid out centrally. The use of segregated special needs education was also affected by the prevalence of private schools. The authors showed, that a high private school rate had the effect that a larger propor-

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<sup>7</sup>At times termed “soft” disabilities because the diagnosis of these, Parrish (2002) argues, is often more subjective and less medically determined compared to diagnosing impairments like deafness or blindness. Albeit termed “soft” this does not imply that they can’t be severe.



tion of the remaining public school' pupils were enrolled in comprehensive special needs services (Bækgaard & Jakobsen 2011:2). Overall the results indicated the importance and effect of the division of budgetary responsibilities.

Today the local funding models are undergoing changes, steadily devolving more and more responsibility to the school level. As a result of the legislative demarcation of special needs education, funds are transferred from the specialized areas to the general education budget. The effect of this legislative change is still difficult to isolate. Statistics from Statistics Denmark however gives some early indications of whether these changes are affecting the use and placement of special needs education. Table 3.2 summarizes some important indicators.

	2010/11	2011/12	2012/13
Total number of pupils in the public schools	590,861	578,877	577,396
- hereof pupils in segregated services			
1) special needs schools and residential institutions	13.231	12.291	11.641
2) special needs classes and public youth schools	20.745	18.970	18.323
- hereof in inclusive services			
3) mainstream classes in the general public school	32.950	36.536	856
Municipal net expenses for the public school, in 2011, 2012, 2013 (1000 DDK)	32,047,064	32,126,821	31,536,900
Municipal net expenses, special needs schools, in 2011, 2012, 2013 (1000 DDK)	5,228,675	5,905,934	5,753,589

- *Table 3.2 Pupils in the public school, respectively in the segregated and inclusive services and municipal net expenses, 2011-2013. Source: Statistics Denmark*

As seen in the table, approximately 12% of the public school pupils were receiving some sort of special needs education in 2010/11. Since then, this proportion has however declined. Due to the implementation of the legislative amendment the numbers are not directly comparable across 2011/12 to 12/13. One exemption however is the development in the use of segregated special needs education, in that, these pupils still receive at least 12 lessons of special need education per week. This development in the period 2007 to 2013 is summarized in the Table 3.3, which also depict the segregation rate (i.e. the proportion of pupils receiving these services).

From 2007/08 to 2010/11 the segregation rate steadily increased. In 2011/12 however, the segregation level dropped, something, which as earlier mentioned, has not taken place since 2000. As in 2000 the drop in 2012 coincided with a change in funding. But unlike the former situation the decreased use has continued into the

school year 2012/13. Even despite the fact that the number of pupils enrolled in private schools has increased during the same period.

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Pupils enrolled in segregated special needs services	30,000	32,331	33,197	33,976	31,261	29,964
Segregation rate	5.0 %	5.4 %	5.6 %	5.8 %	5.4 %	5,2

- *Table 3.3 Number of pupils and segregation degree in the Danish public school system, 2007/08 – 2011/12. Source: Statistics Denmark*

As depicted in Table 3.4 special needs education in 2013 is primarily given to pupils in separate special needs classes, placed in the general public school, and to pupils referred to segregated special needs schools.

Number of pupils receiving special needs education			31843
In the public school			18704
In special needs classes within the general environment			1713
In a mainstream class			1569
In private schools			32
In special needs schools			12135
In boarding schools			972
The distribution of special needs education cross grade levels			31843
Pre-school classes	1352	6 <sup>th</sup>	3383
1 <sup>st</sup>	1716	7 <sup>th</sup>	3600
2 <sup>nd</sup>	2139	8 <sup>th</sup>	3760
3 <sup>rd</sup>	2618	9 <sup>th</sup>	4096
4 <sup>th</sup>	2794	10 <sup>th</sup>	3225
5 <sup>th</sup>	3100		

- *Table 3.4 Special needs education in 2013 distributed across school types and grade levels. Source: Statistics Denmark*

An interesting pattern emerges, when studying the use of special needs education across grade levels. As seen in the table the use of special needs education is less prevalent in the pre-school and 1<sup>st</sup> grade class. From here on however it is steeply rising and in the end, that is in the 9<sup>th</sup> grade, more than tripled. This may indicate that inclusion is pursued more intensively for pupils in the beginning of their

schooling. But the older they get the more likely they are to be referred to segregated special needs services. It is however of course difficult to say whether this is a part of a new trend towards a new practice in handling special needs education. Finally, it is interesting to note that the prevalence of special needs education in the context of private schools is very limited, with only 32 pupils of all private school pupils receiving special needs education. Statistics from Statistic Denmark further show that there is a geographical and gender influence on the prevalence of special needs education. Special needs education is more prevalent in the 'peripheral municipalities' and a disparity between boys and girls exist, in that, 7.2% of all boys receive some kind of special needs education, whereas the similar number for girls is only 3.0%. All in all, compared with the 2016' objective of a segregation rate of 4%, there is still some way to go. More precisely, approximately 7000 pupils' still need to be included in the general environment, in order to fulfill the objective (Statistics Denmark).

Overall however, the continued decrease in the segregation rate indicates that the division of budgetary responsibilities has affected the pattern of use, when it comes to special needs education. Again this indicate that the propensity to refer a pupil to special needs education have been linked and influenced by budgetary considerations and not only determined by the needs of the children. With the legislative amendment official referrals or diagnoses are no longer needed in order to facilitate or start inclusive-seeking support, thereby eliminating the potential link between diagnoses, support and funding; bringing with it the possibilities for other types of funding mechanisms to be utilized. It is however important to note, that it is not possible, based on the analysis above to analyze the extent to which disabilities have been over-identified or over-served over the years. What can be argued is that, the redistribution of financial responsibilities has affected how the financial incentives are aligned; once again underlining the importance of studying and understanding the incentives springing from the specific funding model.



## CHAPTER 4. WHAT IS FORMULA FUNDING?

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### 4.1. INTRODUCTION

Various methods can be used to allocate funds from state/municipality to local service providers. This includes incremental budgeting, zero-based budgeting, program budgeting, initiative-based budgeting or responsibility centered budgeting in addition to more alternative methods such as allocating according to the quality of local bids, on the basis of political patronage, by historical precedent, or simply by reimbursing actual expenditure (see e.g. Mayston 1998; Smith 2003, 2007a, Zierdt 2009; Agyemang 2010). Depending on the nature of the task and the political objectives of the service area particular funding methods have been favored.

Formula funding, Smith (2007a) notes, has increasingly gained acceptance as a way of avoiding the negative consequences associated with the other methods. Incremental budgeting for example may maintain “historical relativities”, albeit not guaranteeing resources to be allocated in accordance with actual needs. Incremental budgeting further complicates the ability of payers to react to changing circumstances, which may hamper the payer’s ability to respond to changes in needs (Smith 2007a:4). In contrast, zero-based budgeting assumes a zero base at the beginning of each budget cycle. This implies that all budgeting decision are made as if they were completely new and based on a total cost analysis of each program. In theory this should open up for an allocation which can accommodate changing patterns of needs. The comprehensiveness of this approach however makes it time consuming and although it in principle may facilitate the discontinuation of excessive programs it is in practice close to impossible to implement (Mayston 1998).

Allocating funds according to political patronage has also been associated with a range of problems. Electoral or political consideration will often become so influential that the allocation will tend to be directed towards the needs of the median voter (Heald & Geaghan 1994) with the end result being neither efficient nor equitable. Such a method, Agyemang (2010) argues, will often lead to an inflation of bids and ‘pork barrel’ politics which to a great extend will be accompanied by perceptions of unfairness and the potential for corruption. Lastly, if the model is based on reimbursements of expenditures unintended consequence may also arise. Mere reimbursement can namely include budget holder to overstate needs or tasks due to no countervailing incentive to moderate such expenses (Smith 2007a:4). Similar situations can also come about if funds are allocated based on the size of local bids; a type of distribution methods which according to Smith *et al.* (2001:218) often will fall short of being efficient or equitable. As a result, formula funding has become a widely accepted method for setting the budget of local service providers.

Understanding the associated effects of a particular payment method is important, in that, as argued by Smith (2007a:18) “*precise **method** of paying may have important incentive effects for the recipient of funds, over and above the **level** of funding*” (emphasis in the original). In fact, Barnum *et al.* (1995: 23) notes, the model of payment creates powerful incentives which affect provider behavior and with it the quality, efficiency and equitability by which outcomes are delivered. The purpose of this chapter is to review and present the general rationales behind, together with the advantages and disadvantages associated with distributing funds in accordance to a predetermined formula expressed in mathematical terms. The discussion focuses on the general aims associated with funding models, namely efficiency, equity and managerial accountability, while the more specific educational goals of the Danish school system are to be discussed later in connection with the two field studies.

## 4.2. FROM FORMULA BUDGETING TO FORMULA FUNDING

Over time the definition of what constitutes *formula funding* or *formula budgeting* (the terminology originally used) has changed slightly. Technically, the formula has consistently been understood as a decision rule of unspecified complexity and domain. This decision rule, Meisinger (1976) noted, is “imposed” on institutions e.g. public schools or institutions for higher education, by state agencies and used as a mean for generating and reviewing institutional budget requests or parts thereof; an understanding which made Meisinger conclude that the *formula* per se can be understood as a contract, where institutions in return for agreeing to abide by the formula guidelines expect to receive funding devolved through the formula. Similar, Moss & Gaither (1976:550) argued, where the *budget* per se is the document which reflects the approved levels of expenditures, formula budgeting on the other hand serves as a *mechanism* to arrive at these future estimates of expenditure.

In more recent literature the term formula funding has to a large extent replaced the notion of formula budgeting. The terms are similar as can be seen in the definitions put forward by Heald & Geaughan (1994:268) and Smith (2007a), the two sets of authors mostly used when defining formula funding. Where, Heald & Geaughan (1994:268) define formula funding as “*a mechanism for the transfer of resources from government to public/quasi-public/private bodies which uses an explicit distribution methodology in order to ensure that the needs of the recipients are taken into account*”. Whereas, Smith (2003, 2007a) on the other hand defines formula funding as “*the use of mechanical rules to determine the level of public funds a devolved organization should receive for delivering a specified public service*”.

As the earlier definitions of formula budgeting, definitions of formula funding also stress the use of a mechanical distribution methodology applied as a mean to allocate funds. Likewise, the definition brought forward by Smith, also stresses the contribution of formula funding in making the budget of the local entity; a budget

within which, as underpinned in the earlier definitions, the local provider is expected to fulfill their duties. The formula itself can be a simple rule which allocate funds based on e.g. a fixed amount *per capita* for a specific period of time or very complex taking into account a range of explanatory variables (Smith 2007a:5). This design decision often comes to depend on the task to be funded, the complexity of needs and the political considerations behind. Accordingly, Levačić (2007:209) notes, the specific design often boils down to a tradeoff between simplicity and sensitivity.

The replacement of the term formula budgeting in favor of formula funding, ties into a larger change in the understanding of the purpose and objectives of public sector funding. From a viewpoint where formula budgeting was seen as a mean to enable the identification of an equitable, adequate and predictable resource base; formula funding increasingly has become a complicated methodology for allocating public funds. While, formula budgeting mostly pertained to traditional central appropriation control, characterized by line-item structures restricted to one-year cycles, the aim of formula funding is often ascribed to include a range of purposes, including the achievement of particular political goals, increased productivity and not at least the strengthening of local managerial accountability.

This makes Smith (2007b:275) note that: “*the overarching objective of formula funding [is] to offer appropriate incentives to provide those services in line with the payer’s objectives*”. The full effect of formula funding, he accordingly notes, can first be established when three institutional aspects are in place. 1) The delivery of public service must to some extent be devolved, placing the responsibility for the actual spending with the devolved organization. 2) A mechanical formula, based on adequate data and explicit performance criteria, determining the level of funding to be allocated, must exist, and lastly 3) incentives must be in place so that the devolved entities will adhere to the financial allocation of the formula (Smith 2007a:5-7).

### 4.3. RATIONALES FOR FORMULA FUNDING

Improved equity and access to services, high quality and the promotion of effective and efficient use of resources, and where appropriate cost containment are often ascribed as the main objectives of public sector funding. New Public Management inspired reforms have especially stressed the importance of constructing governance models which simultaneously enable service providers to become efficient and productive in their service delivery (see e.g. Hood 1991, 1995; Pollit 1995; Pollitt & Bouckaert 2000 for classical literature on NPM and see Lapsley 1999; Broadbent & Guthrie 1992; Guthrie *et al.* 2005 for reviews on public sector accounting reforms). This means that funding models are expected not only to promote equitable distri-

butions but also to establish clear lines of accountabilities, while ensuring that the specific performance objectives of the service area are achieved (see Fazekas 2012).

In the context of formula funding, a range of concerns have been identified as motivations for implementation. Ross & Levačić (1999) for example identify effectiveness, efficiency, equity, integrity and accountability/transparency as main criteria's, while newer literature such as Smith (2007a) and Levačić (2007) stress especially efficiency, equity and political arguments as the main objectives. It is these latter arguments for implementing formula funding which will be reviewed next.

#### 4.3.1. EQUITY

“Needs” and equity are important aspects for understanding why formula funding has gained acceptance. In the eye of Meisinger, a main reason for implementing formula budgeting was to provide equity, understood as: *the same funding for the same programs or conditions* (Meisinger 1976:30). The ‘need aspect’ is also found in the newer definitions of formula funding. Heald & Geaughan (1994) clearly underpin this by arguing that formula funding implies taking into account the needs of recipients when allocating funds. More subtly included in Smith’s definition (2007a), he argues, that an objective of a payer is often to enable all local agencies to deliver some “standard” package of service. No matter how this standard is defined, when applied to a locality it implies a certain level of expected expenditure – the local agency’s “spending needs” and it is this spending need that the funding formula seeks to estimate.

A well-designed formula, Smith argues, allows funding to flow in proportion to the service provided, thus compensating the devolved entities for their users’ particular needs and not necessarily for service provided. This type of ‘needs based formula funding, Smith (2007b:275) notes, only offers the *opportunity* to deliver the expected standard, giving no direct incentives to secure any performance standard whatsoever. Nevertheless, since formula funding to a larger degree is able to respond to actual patterns of needs, the actual equity of the formula often becomes a central evaluation criteria for judging whether a particular formula is to be deemed good, proper, useful or legitimate.

Equity however is a relative concept, and studies have accordingly discussed its meaning and how to measure it (see e.g. Berne & Stiefel 1999:7, Baker & Green 2008:204). Equity can be understood as, the participant’s perception of a “fair share” of a distribution, or as a tolerable level of funding inequality among service providers (Meisinger 1976:30). In relation to the first Moss & Gaither (1976:553) noted how formula budgeting offers the payer a way to systematically resolve competing claims for limited resources. Put differently, as noted Smith *et al.* (2001: 317), formula funding thus allows for a systematic treatment of the budget process thereby decreasing the pressure to change or redistribute funds after the budget



process has finished. Case-by-case scrutiny of budgets is thus made redundant; making the subsequent budgets seem more ‘fair’, as these are unaffected by any actions from the budget holder aimed at influencing how resources are allocated.

In terms of the other ‘equity-understanding’, Mayston (1998) characterizes, formula funding as a method which is transparent and objective, and a mean to limit the degree of aggregated expenditure. The result of this, Smith (2003, 2007a) argues, is an allocation closer to the actual needs of the service area. Depending on the “technical correctness” of the formula, formula funding can thus facilitates comparisons of institutions within and outside the system (Halstead 1974) while recognizing the diverse financial needs of the providers (Miller 1964). Yet, the specific type of equity sought will depend on the focus of the payer; a focus which will also affect whether a distribution is more or less equitable (see e.g. Ross & Levačić 1999).

Within education funding the notion of equity was first comprehensively addressed by Berne & Stiefel in 1984. Here three concepts or measures were put forward: equal opportunities, horizontal and vertical equity. Equal opportunities addresses the concern that ‘the starting line be fair’ and in particular that there is no discrimination of the basis of characteristics such as ethnicity, race, sex, income or wealth (Berne & Steifel 1984). Yet, in the context of funding the concern for horizontal or vertical equity has especially been identified as important for the payer when the specific formula is designed (Smith 2007a:67, Levačić 2007:209).

Vertical equality stems from concerns with variations in outcomes and is build on the premise that those in need must be supported proportionately to their needs and characteristics. The overall objective will thus be to ensure that all users are able to achieve the same education standards (Smith 2007a). In a school setting vertical equity can be gained by compensating schools for additional costs associated with pupils with special needs. Schools directed towards pupils with severe needs will accordingly receive sufficiently more funds compared to school teaching pupils with lesser needs (where ‘sufficiently more’ means enough to achieve equal educational outcomes) (Baker & Green 2008:217).

Horizontal equity in contrast means that equalization of input is pursued, i.e. equal treatment of equals. Input is here held equal while outcomes are unequal (Berne & Steifel 1994:406). In education this is done by allocating the same amount to districts with the same characteristics e.g. characteristics relating to the cost of providing basic education such as wealth, size, and socio-demographic status. If considered to be equal schools will accordingly receive comparable levels of funding.

Whether vertical or horizontal equity is the objective will depend on the payer’s interest in reducing variations in outcomes or in equalization of input (Caldwell *et al.* 1999). In practice, as noted by Smith (2007a:72), an equitable allocation is however often understood as one which reduces to a ‘reasonable level’ the disparity in

spending across school districts. Most formulae thus allocate funds based on a fixed amount per pupil (input), thereby assuming average responses to social and economic circumstances at an average level of efficiency.

A range of studies conducted mainly in US using regression techniques has analyzed whether school formula funding can be deemed equitable (see e.g. Gronberg *et al.* 2004, Imazeki 2007). The application of a student-weighted allocation were here shown to enhance the equity of the general allocation. Discussing student-weighted allocations as an alternative to the traditional staff-based allocation, Miles & Roza (1996) for example showed how distributing dollars to schools using a student-centric formula (student-weighted allocation) served as way to increase equity in school spending. The funding was further made more transparent and ensured a greater level of flexibility and accountability for how the resources were spent (see also Childress & Peterkin 2004, Hill 2008, Chambers *et al.* 2010).

#### 4.3.2. EFFICIENCY

*Efficiency* is also identified as a main reason for deploying formula funding. Efficiency is here understood both as the ability of funding to improve *allocative* and *managerial* efficiency. Managerial efficiency or X-efficiency (Liebenstein 1966, 1973) is the extent to which budget holders perform specified functions at least costs. Formula funding, as argued by Smith (2007a), can ensure this as it creates efficient management among local organizations, leading to the creation of clearly defined incentives and rules for the setting of budgets for local providers. Put differently, formula funding does not only bring about the creation of proper financial management and business planning arrangements. When implemented alongside decentralization of power, the setting of clear budgetary regimes further offers organizations freedom to respond to local circumstances, to innovate, and to seek out economics of scale (Smith 2007b:279).

Allocative efficiency on the other hand is the extent to which the allocation of resources is in line with preferences of the society. Allocative efficiency may for example emerge as a result of greater parental choice possibilities, illustrating also the connection between formula funding and education markets (Bradley & Taylor 2002:298). An allocative efficient distribution, in other words, can be established by aligning the formula's incentive structures of the formula with the payer's intentions. The political objectives of a service area, in this way, not only come to guide the financial transfers but once the objectives have been set, the fundamental efficiency argument for implementing formula funding, as noted by Smith (2007b), is that – if designed properly – it allows the payer to implement an optimal allocation in line with the objectives. Any deviations from this will accordingly imply a reduced effectiveness by which funds are used, and therefore a loss of efficiency (Smith 2007b:277).

#### 4.3.3. POLITICAL ARGUMENTS & MANAGERIAL ACCOUNTABILITY

Following the above argument there is thus strong political and managerial rationales for implementing formula funding with a main merit being that funding can be used to transfer political objectives to service providers. Formula funding has been shown to be a vital catalyst for change, because of its potential for providing local providers with specific incentives (Edwards *et al.* 1999; Levačić & Ross 1999; Kominis & Dudau 2012). Formula funding can serve contrasting political objectives (Heald & Geaughan 1994:167) and the key challenge thus becomes one of successfully designing the formula so that it encourages behavior which will fulfill the political set objectives. Because formula funding can be a powerful mechanism for motivating behavior it becomes even more important that the funding base is aligned with the political set objectives; a departure from this will not only weaken the ability of the formula to induce desired behavior but also reduce the efficiency by which funds are distributed. Formula funding therefore can be used to steer local behavior, and in the process it can also create clear lines of accountability.

The importance of politics more generally was present already in the earlier discussions of formula budgeting. Meisinger (1976) for example argued that policy judgment is unavoidable when using formulae to distribute funds, as even decisions on what is included in the formula are matters of policy. Formula budgeting, Meisinger (1976) argued, is consequently a combination of technical judgments and political agreement. Similar arguments are found in the literature on formula funding. Hanushek (2006) for example stresses the political nature of determining quality standards as an important part of the formula process. Likewise Smith *et al.* (2001:317) note, policy judgments which have important implications for resource allocation are needed at all stages of formula funding. This makes the process of budgeting and resource allocation, as also noted by Wildavsky in 1975, political in nature, especially in a public sector context where budgeting and resource allocation imply setting priorities and potentially rationing access to public services.

Formula funding in consequence, is not a neutral and rational process which can aid decision-makers in rational decision making (Miller 2001). Rather, Darling *et al.* (1989) argue, formula funding often becomes an instrument of education, social and fiscal policies where the incentive structures of the model means that the funding mode itself comes to act as a vital mechanism for transferring political objectives to the devolved organizations (see also Smith 2007a). By acting as an indirect steering mechanism the allocation model can thus influence the behavior of the recipient in a way which hopefully is accordance with political set objectives (Broadbent *et al.* 2010) Formula funding in other words, becomes a powerful mechanism through which the payer can stimulate behavior towards the accomplishment of political goals. As emphasized by Brinkman (1984:23) formula funding is thus a *standard* as much as an *instrument* for resource allocation; and its full contribution is first understood when also viewed as the centerpiece of *bureaucratic* decision-making

processes. If long-term commitment to a specific model can be established, formula funding provides a predictable base for planning and budgeting (Darling *et al.* 1989:560). Only if the chosen characteristics upon which the formula is build change, e.g. enrollment levels, then the size of funding will change accordingly. The allocation thus becomes functionally independent of past resources; although correlation between present and past resources may exist if the relevant characteristics upon which the formula is based remains stable (Heald & Geaughan 1994:268).

If combined with performance measurements and target setting then the politicians and public managers should in principle be able to visualize to the public what their money is being spent on. Thereby, as noted by Verbeeten (2008), bringing forth transparency while also creating accountability for results. Lines of accountability are hence made visible, as the devolvement of funds ties together budgetary responsibility and responsibility for actual implementation of the political set goals locally. Providers are accordingly encouraged to find the best, most productive way to utilize the resources available and the devolvement of funds is here a crucial mean. Political decision-making is however still be a decisive factor in that the overall objectives of the service area are othen stated in laws, regulations or in curriculum guidelines (Hofstede 1981). However, as political objectives, as discussed by Kerr (1975), can be purposely vague and general in nature, not indicating the host of decisions and alternatives available for achieving the objectives (Kerr 1975:769), the actual implementation is left at discretion of the individual provider. Public Management inspired reforms have resulted in a shift from input control to a greater focus on output and outcomes (Olson *et al.* 1998). In a school setting the examination or tests scores are increasingly used as measures of school success. Simultaneously, management by objective is used to ensure the fulfillment of educational goal. The use of quantifiable goals has allowed for monitoring and evaluation of the extent to which objectives are fulfilled and value for money is achieved.

The enhancement of central control, as discussed above, follows the general trend that the use of formula funding has moved away from its former empowering role towards a stronger focus placed upon cost reductions and refinement of central control (Heald & Geaughan 1994:267). In this way, formula funding gives way for patterns of accountability to rise through the connection of resource allocation and the ability of service providers to accomplish the political determined objectives. Overall, the resource allocation process thus not only comes to specifies the level of funds to be devolved, but also whom in the ‘education production process’ is held accountable for how resources are spent.

#### **4.4. WEAKNESSES OF FORMULA FUNDING**

A range of weaknesses have however also been associated with the distribution of funds via formula funding. The following sections present the most vital concerns.

#### 4.4.1. DECREASING INPUT AND QUESTIONS OF ADEQUACY

The linear aspect associated with enrollment dependent formulae can potentially pose a problem. Being advantageous for institutions in periods of increasing activity, where unit cost in general will decrease as a result of economics of scale, it has the opposite effect in periods of declining activities (Moss & Gaither 1976:553). Formula funding might here effectively prevent the development of new initiatives (Moss & Gaither 1976:556) because the funding on its own is only intended to meet current fiscal needs. Long-term efforts are accordingly often not included in the formula, while major commitments, such as maintenance and utilities, may not reduce correspondingly when enrollments decline. Budget saving adjustments may as a result be eroded; alongside with fiscal flexibility and at some point the quality of service may be compromised (Moss & Gaither 1976:556).

Question of adequacy may also be raised. Adequacy refers to whether the specific allocation is adequate for meeting the intentions behind the allocation model. Here an important understanding, as stressed by Allan (1980), is that formula funding cannot self-adjust for a basic, improper level of funding. No formulae can thus in general resolve problems of severe inadequate funding. This, Darling *et al.* (1989:562) argue, can only be addressed on a policy level.

School funding studies on adequacy have mainly been conducted in the US with the purpose of determining whether a given system provides sufficient spending for providing pupils with the opportunity to meet the performance standards set by the authorities (see e.g. Augenblick *et al.* 2002, 2003, Duncombe & Yinger 2000, Imazeki & Reschovsky 2004, Evans *et al.*, 1999). These studies have revealed the existence of multiplicity of approaches to calculate what constitute an adequate level of funding in a given situation, a fact which, according to Downes & Stiefel (2008:225), can be ascribed to a lack of a proper understanding of the technology linking school inputs to pupil achievements. A substantial attempt to understand what constitute an adequate allocation is the Odden-Picus Evidence Based Model (Odden & Picus 2008:1). This model, which is based on randomized assignments, statistical procedures and best practices, seeks to specify which school level elements are required in order to improve student outcomes.

In a UK context, studies on adequacy have mainly focused on the influence of Local Education Authorities (LEAs) in determining the specific formula details (West 2009; West *et al.* 2000; Simkins 2004; Levačić 2008). Here, as in the US, a general concern has been that even if public authorities can determine and allocate the 'adequate amount' of resources to providers, factors such as devolution and block grants may make it unclear how schools actually spent their resources. For example in relation to special needs education where it may be difficult to track whether additional resources are actually spent on the pupils for which this extra funding was intended. Similarly, it may be unclear whether local actions are actually diluting the

original intentions of the allocation. Overall, the literature on adequacy and school funding has as a consequence been criticized for a lack of firm knowledge on the relationship between in and output (see e.g. Costrell *et al.* 2008; Loeb 2007; Hanushek 2006, 2008).

#### 4.4.2. QUALITY OF SERVICE

Another weakness of formula funding is that the methodology on its own gives no incentives for quality improvements. In fact, as noted by Smith (2007a:117), the incentive structures implicit in most systems of formula funding run the risk of compromising the quality of services, defined as their effectiveness in securing desired standards. Earlier studies on formula budgeting also expressed concern over quest for quality. Gross (1973) for example noted how the use of formula funding tends to have a “leveling” effect on providers and their supplied quality. This leveling effect, Meisinger (1975) emphasized, occurs when otherwise different service providers are subjected to the same distribution methodology; a process, he notes, is more likely to be characterized by a leveling *down* than a leveling *up* effect.

As formulae further are ill-suited to reflect non-quantifiable elements, service providers can be induced to focus exclusively on those things which can be modeled or measured in the formula, rather than on those things that “should be considered” (Allan 1980). The reward structure inherently built into the formula (either implicit or explicit) will in other words encourage certain behavior and service providers will in the process tend to develop programs and practices that produce the maximum results under the actual formula. Lastly, albeit this is not the fault of formula budgets *per se*, there is a tendency, Allan (1980) argues, to use formulas as a mean for budget control – that is to use the formula budget (in essence, a requesting device) – to exert control over the internal allocations and spending. With the consequence that the budget comes to act as a straight-jacket on local managerial action.

#### 4.4.3. POLITICAL ACCOUNTABILITY

Although formula funding appears objective and less political than other funding methodologies, politics are, as already mentioned, still an inherent part of formula funding. Although funding formulae cannot make policy decisions, they are embodied. The ramifications of which are often not foreseen (Miller 1964). Formula funding, to a large degree shift the level of politics to the more technical level – a level associated with the mathematic relationships of the formula.

Further albeit formula funding can make accountability patterns visible, it can also be a mean to devolve responsibility downwards away from the politicians; in fact Heald & Gaughan (1994:269) stresses “*formula funding divert argument into the bases of distribution away from an exclusive focus upon the outcome of the distribution process and allow particular outcomes to be defended on the grounds that the rules and procedures are ‘fair’*”. The use of formula funding can accordingly

detach distribution decisions from decisions on aggregates, and in the process making these operate on different time tables. Decision-makers thus distance themselves from the responsibility of the impact of aggregate-constraint distributions. Credits for the totals can thus be claimed by the payer, whilst blame for the detailed impact can be deflected to the funding body. This behavior is, according to Heald & Geaghan (1994: 269), especially pronounced in a situation of resource withdrawal.

The payers can, in other words, to some extent decouple themselves from the consequences of the allocation model, instead placing the responsibility for the subsequent results on the local management (see also the discussion in Weaver (1986) on blame avoidance as a policy motivation or Verbeeten 2008). This redefines the power relation between the payer and budget holder, in that, the latter is assigned a less secure and predictable funding base, whilst the payer is able to practice a much more direct structuring of incentives in light of its' current objectives.

The significance of power relations between the actors involved in the formula design was studied by Agyemang (2009, 2010) and Edwards *et al.* (1996). Here, it was shown how politicians often seek to retain discretion over the determination of the specific coefficients used in the formula. The power relation between the funder and budget holders was in this context very important for how the final result of the formula came to be (Levačić 1992, Edwards *et al.* 1997, Agyemang 2010). The final allocation making up the service providers formula budgets, in other words, came to represent both the substance and result of a political bargaining process (see also Cyert & March 1963). A process where different interest groups seek to influence both the formula design and goal setting process.

Being a result of a political bargaining process is though not exclusively a bad thing, as this may also be a way to ensure long-term credibility. The payer, Smith (2007a:140) for example notes, will be more likely to feel 'bound' to the distributional rule if involved in the process. If doubts are cast about the long-term credibility of the distributional rule this will affect the ability of the formula to stimulate desirable behavior (Andersen *et al.* 2010:35). 'Principal-Agent' theory predicts that economic incentives are only expected to work if employees are convinced that the financial reward will be released for behavior which should trigger the reward (Prendergast 1999:7). Accordingly, Jan (2003:271) notes, an economic incentive is completely unreliable if the financial reward is triggered independently of the incentive scheme. Politicians should accordingly be careful with using additional funding schemes or make alterations affecting the actual level of funding supplied. In the long run such actions will not only question the credibility of the formula, but also the non-dispensability of it. Formula funding can, however, if the formula is credible and combined with relative precise forecasts of future demand, give service providers a relative stable base upon which to plan and if necessarily to adjust their spending accordingly (Christensen 2008:91).

## 4.5. PAYMENT METHODS OF FORMULA FUNDING

So far the chapter has presented general rationales behind, together with advantages and disadvantages associated with formula funding. In order to conclude the chapter the two main payment methods (Smith 2007a:39ff) applied in the context of formula funding will be presented, namely *case-* and *capitation payments*.

### 4.5.1. CASE PAYMENTS

When using a case payment approach for the distribution of funds budget holders are reimbursed on the basis of some measure of output, that is, a measure of the *actual* local activity, for example a count of service users. The usual approach, Smith (2007a:47) notes, is to reimburse according to the expected expenditure of a service user, which means that in order for case payments to work, specific criteria's under which a user is entitled to receive a service must be specified in advance. And this must be accompanied by a scheduled fee for such services. Providers are then reimbursed according to the fee when providing services to a user.

Case payments are especially relevant when unambiguous indicators of service needs can be established. In a situation where users are reasonably homogeneous it may be feasible to apply a single case payment for all users – often however this is not the case – and case payments are accordingly often tailored to the specific needs of the users. This can be done by incorporating ‘risk adjustment’ schemes which ensure that each payment type varies according to the dependency of user’ needs (Smith 2007b:280). The main objectives for using case payments are to encourage local agencies to increase the number of service users and to implement efficiency improvements so as to reduce unit costs (Smith 2008:28).

In school funding case payments are often used because the number of pupils enrolled, or the number of classes established, is easily verified. The aggregated formula budget is accordingly found by inferring each case payment to the actual needs of for the pupils, giving a budget which varies with actual needs. Case payments accordingly satisfy the ‘need criteria’. Reimbursing according with the actual number of users has however been found to be problematic and vulnerable to the creation of perverse and unwanted incentives. It can for example encourage undesirable stimulation of demand and the count of activity can become vulnerable to fraud in situations where such counts are difficult to verify. Further, since the individual payer often does not know the demand in advance it can be difficult to control the aggregated expenditure satisfactorily.

In a school context the use of case payments is however widespread since these disadvantages to a large degree can be avoided. Not only are the number of pupils more or less outside the control of the local school, but the reported numbers can be more satisfactorily verified and audited, and are predicably to a high degree of accu-



racy by the payer (Levačić & Ross 1999). Under such circumstances, Smith (2007a:46) notes, it would actually be perverse of the payer to rely merely on estimates of the expected number of users.

#### 4.5.2. CAPITATION PAYMENTS

Smith (2007a:41) defines capitation payments as “*the amount of public funds to be assigned to a person with certain characteristics for the service in question, for the time period in question*”. The method reimburses according to the *expected* level of local activity, which means that the payer seeks to estimate a budget holder’s expected level of output and to reimburse accordingly. Capitation payments consequently satisfy the most common objective of allocation, namely that of ensuring that equal funds are directed towards individuals, in equal circumstances, regardless of where they live.

The most rudimentary way to pay a locality when using capitation payments is to reimburse an equal amount per head of that population. Making the expected level of activity an estimation of the actual level of service, a service provider is to provide, at a given standard of service (Smith 2007a:39). In contrast to case payments, which are attached to specific users, capitation payments are attached to every member of the population “at risk”. The payer thus seeks to fund the locality purely as a risk pool. This makes the allocation independent of the specific level of output (e.g. pupils enrolled) and providers are paid a fixed amount pr. potential user. The budget thus represents a spending ceiling (Aas 1995:206) or can be described as a block payment consisting of the aggregated capitation payments, with possible adjustments to the expected level of service expenditure. This fixed global budget is accordingly found without reference to actual service use (Smith 2007a:5). This gives the following equation for the budget for the devolved organization  $i$ :

$$Budget_i = \sum_{j=1}^{N_i} c(x_j^i).$$

where,  $N_i$  is the number of clients for which organization  $i$  is responsible for,  $c$  is the capitation formula and  $x_j^i$  a vector of characteristics of client  $j$  (Smith 2003:305).

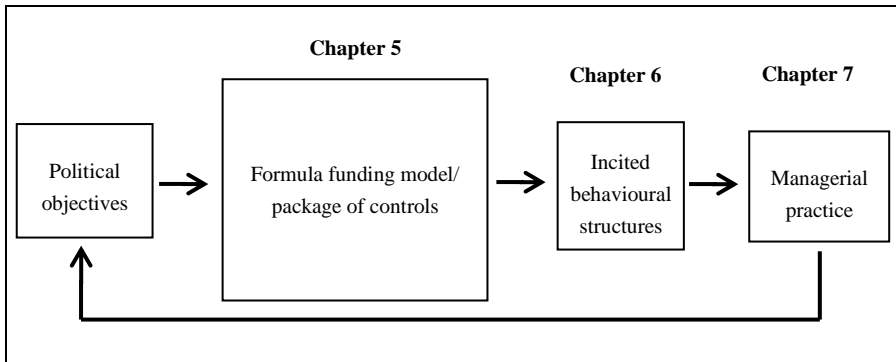
Similar to case payments, a capitation approach, is justified when the expected service use is not substantial different across users, or when the socio-demographic profiles of budget holders are the same. As this is often not the case risk adjustment schemes are implemented in order to account for variations in expected spending needs. A modest refinement can here be to confine the population ‘at risk’ to any obvious demographic stratum, from which service users will be drawn. In school funding it is for example common to distribute in accordance with the estimated number of children; since this measure better captures the population to be funded. The payments are often further adjusted in order to account for more subtle variations in expected spending needs (Smith 2007b:284), for example by taking into account variations in age, gender or socio-economic characteristics of the pupils.

The effectiveness of the method will depend on how successfully the payer can adjust the capitation payment to account for variances in population characteristics (Smith 2007a:46). The general objective for using capitation funding is accordingly to reimburse budget holders for variations in needs and not so much to encourage efficiency among the local organizations (Smith 2007b:284). The method is thus often preferred as it reduces the reliance on output data provided by the budget holders; in turn reducing the opportunities and incentives for manipulation and fraud.

In sum, case and capitation payments constitute the main methods for distributing funds. Yet, due to the stark incentives associated with pure case and capitation methods a mix of payments is often used (Barnum 1995:23). A formula may thus consist of different components, with the resulting formula budget being the aggregated total of these discrete budgets, which may be directly related to distinct purposes (Levačić & Ross 1999:38). Depending on the intention of the payer a more or less vast part of the education funds can be allocated through the formula. Yet, since the major efficiency benefit arises from the presumption that schools are better judges of their spending needs, the effectiveness of the formula and the associated incentive structures are likely to diminish, the more funds are to be allocated through other types of mechanisms. Accordingly, the larger the proportion of funds which is included in the formula, the greater the efficiency gains are likely to be (Levačić 2007:218).

## Part II Theoretical framework & Methodology

**Part II** contains the dissertation's theoretical and methodological chapters. The first three are theoretical chapters, each of which addressing different aspects of the proposed relationship between political objectives, the formula funding model, its inherent incentive structures and the resulting managerial practice.



- *Figure II.1 Chapter content following the proposed relationship between political objectives, the formula funding model, its inherent incentive structure and the resulting managerial practice*

Focusing on the technical aspects of formula funding models, **Chapter 5**, identifies and discusses the main elements of formula funding models, arising respectively from the formula itself and from the related control components. In the final part of the chapter these findings are gathered and discussed within the context of understanding the formula funding model as a 'package of controls'.

**Chapter 6** analyses the incentive structures and behavioral responses most commonly associated with the components making up formula funding models. The point of departure is the identified rationales for implementing formula funding, i.e. efficiency, equity, accountability. Questions of quality and productivity are also included. The chapter thus studies how otherwise intentions can be reinforced or thwarted by specific design choices.

**Chapter 7** combines the results of the two previous chapters into a framework for local managerial practice. Two control characteristics are here proposed to be the main levers for influencing local managerial practice, that is, the level of budgetary risk and the level of competitive pressure introduced.

**Chapter 8** finally presents the methodology for the study of formula funding models in practice. Discussing the choice of qualitative field studies, the chapter also presents the overall research design, the two municipal settings as well as the type of data collected.



## CHAPTER 5.      FORMULA FUNDING MODELS – A PACKAGE OF CONTROLS

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### 5.1. INTRODUCTION

The formula funding model used to allocate funds from the payer/local authority to the providers of public services constitutes the main mechanism for management control in a public sector context. Not only does the model specify the basis upon which funds are allocated, it also frames the decision-making scope available to service providers. A formula funding model is in this dissertation thus proposed to consist of more than the formula applied for allocating funds. Rather, it will be argued, that the total *control package*, making up the formula funding model, consists of a range of different control components or practices, which in their entirety establishes the frame in which service providers can and are to act. The purpose of this chapter is to identify and discuss the main control components making up a formula funding model applied in a Danish education funding context. Relating to different parts of the funding model, some components springing from the budgetary part of the model, others are more internally oriented relating e.g. to the scope of local decision-making – both budgetary and education-related responsibilities. Yet, other components relate and illustrate the payer's intention to create competition between service providers. Combining these results the final section will discuss this within the understanding of viewing the formula funding as a package of controls.

It is important to note that the results are affected by the context in which they are studied. Firstly, as formula funding is the predominant methodology applied in a Danish education context, the chapter focuses entirely on this distribution methodology, drawing mainly from education funding literature; albeit when relevant themes from health care and higher education are also included. The control components discussed do not claim to represent an exhaustive list of all possible control components of funding models. However based on an extensive literature search the components cover the main parts, with key contributions from Heald & Geaughan (1994), Pedersen *et al.* (2006), Smith (2007a), Levačić (2007) and articles from *Handbook of Research in Education Finance and Policy* (Ladd & Fiske (eds.) 2008). Secondly, the results are affected by Danish legislation, which means that the findings may not be directly transferable to other service areas or countries.

Further following the definition brought forward by Grabner & Moers (2013) a management control package is understood to represent the complete set of control practices in place in an organization, thereby mirroring the organization's control environment. In contrast to a management control system which, the authors argue, is formed if the practices are interdependent and the design choices take these inter-

dependencies into account, the control package represents the complete set of control practices in place, regardless of whether these are interdependent and/or the design choices take interdependencies into account. Where the management system is designed with the intention of creating complementarity and a maximization of “performance” by (simultaneously) deciding on multiple control variables (Grabner & Moers 2013:408) the control package is not *per se* designed with the intention of creating interdependency and goal congruence among control practices. Rather the package is understood to be composed of a set of management control systems and/or a set of independent management control practices addressing potentially unrelated control problems. In this way, management new control practices can be added or others re-designed without taking any interdependencies into account (Grabner & Moers 2013:408).

## 5.2. FORMULA COMPONENTS AND DESIGN CHOICES IN SCHOOL FUNDING

In shaping a school formula funding, I propose that three important design decisions have to be made. Summarized in Textbox 4.1 these sub-decisions respectively relates to, how much of the payment is to be pupil dependent, the devolvement of special needs funds and the precision of the model in meeting actual needs. Each of these aspects is shortly review below.

- Payment per pupil
- Devolvement of funds for special educational services
- Model precision

- *Textbox 5.1 Design choice decisions related to the formula components*

### Design decision 1 – payment per pupil

In a Danish public school context the main unit of funding is the individual pupil, the ‘class’ or a combination hereof (Ministry of Finance 1995:71). The specific design choice thus comes to reflect the major decision, what is the object for funding? Choosing the pupil, a class or a combination hereof means that funding here, in opposition to for example university funding, is not tied to performance levels. In university funding a range of different types of funding formulae has been identified, including enrollment or staff based formulae or performance incentives formulae, where funding is based on performance. Combined with other types of formulae these latter allocate a part of the funds on the basis of performance (Darling *et al.* 1989:560-61).

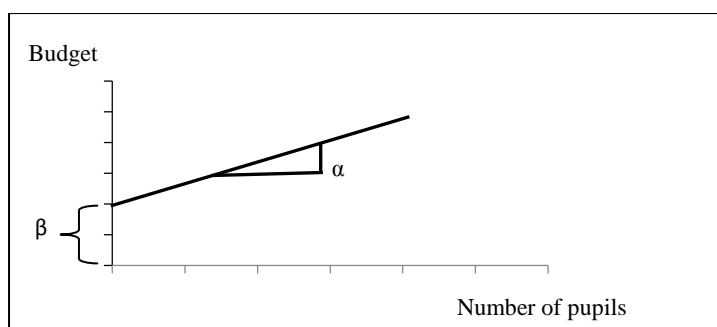
From an effectiveness point of view, tying funding to outcome (e.g. grades) rather than output (e.g. enrollments) is a mean to motivate schools to maximize their edu-

cational effectiveness. However, formulae based on outcomes have due to problems of deciding what an appropriate outcome measure is, taking into account the equity point of view, not been implemented. Yet, the payer in the context of school funding still enjoys considerable flexibility in the mode of implementation (John & Ward 2001:308). The specific mix of payment components can accordingly vary greatly between payers. The specific choice of payments is however crucial in that the interplay of incentives across payment modes can affect both positively or negatively factors such as referral rates for special needs education and the level of cost in general (Barnum 1995:39).

As seen in Diagram 4.1 the funding formulae are basically made up of two components; a pupil dependent and one which is not, giving the formula budget equation:

$$\text{Budget} = \alpha X + \beta,$$

where X denotes the number of funding units (pupils or classes), that is, the coefficient,  $\alpha$ , specifies the amount a school receives each year per pupil or class while  $\beta$  is a fixed allotment independent of pupil numbers.



- Diagram 5.1 Core formula components and effect of pupils numbers

The payer can freely decide the size of  $\alpha$  thereby implicitly determining the size of the allotment  $\beta$ , as the total resources for the general teaching in generally is fixed.  $\alpha$  is often adjusted according to the particular grade form and the larger  $\alpha$  the more comprehensive the budgetary effect will be of enrollment or dis-enrollments. Thus, depending on the payer's intention to for example encouraging competition the first allotment component can be more or less vast.

The allotment  $\beta$  is as mentioned independent of pupil numbers and may instead be allotted based on for example historical or incremental cost considerations. As shown by Levačić (2007)  $\beta$  often includes funds for administrative personnel, financial accounting or building maintenance. Such decision can however clash with the intentions of creating efficiency. The major efficiency benefit from using formula funding arises from the presumption that schools are better judges of their

expenditure patterns, thus allocating funds through fixed item appropriations may hamper the general effectiveness of the formula and diminish the intended incentives structures. Thus, Levačić (2007:218) notes, the more funds that are pupil dependent the greater the efficiency gains are likely to be.

### **Design decision 2 – devolvement of special educational costs**

The second design choice relates to how much funds for special educational services are to be devolved to schools, including for example funds for inclusive-seeking services, for special needs education given within the mainstream environment or for special needs education provided in special needs schools or classes. The individual municipality can freely decide how much is to be devolved to the schools and thus how much is to be retained and funded by the administration.

As discussed in Chapter 3 the division of financial responsibility for special needs funds is very important to consider. Because the schools through the devolvement of funds and responsibilities not only are expected to be able to tailor more precisely their services to the needs of pupils, but their local sense of accountability in terms of how funds are spend is also expected to be raised.

### **Design decision 3 – Model precision**

The third sub-decision addresses the general precision of the model, that is, how precise the allocation, whether based on case or capitation based payments, meets variations in actual needs. If users are reasonably homogeneous it may be feasible to apply the same payment for all. Often however, this is not the case. Thus, as discussed in the previous chapter, risk adjustment schemes can be introduced so that the specific case or capitation payment comes to vary according to the dependency of user' needs. This for example can be done by taking into account variations in age, gender or socio-economic characteristics of the pupils. When determining the specific patterns of responsibility, the framework conditions e.g. socio-economic, are often adjusters of costs. Because if not taken into account, severe differences in equity can arise across budget holders. For example if schools are not compensated fairly for the severity of user needs this can come to affect the quality of service given (Bækgaard & Jakobsen 2011:3).

The use of risk adjustment schemes is however not unproblematic, due to the tension between wanting to model the expected expenditure accurately against the desire to avoid inappropriate incentives. 'Risk adjusters' should consequently be plausible, in the sense of being manifest drivers of expenditure, that is, as argued by Smith (2007a), actual drivers of the associated costs of delivering the required services. They must accordingly be outside the control of local organizations, preventing thereby illegitimate drivers of cost influenced by the organizations' own policy choices.



### 5.3. COMPONENTS DETERMINING THE SCALE OF BUDGETARY DEVOLVEMENT

The specific formula design and scale of allocation is affected and reflected in the appropriation level chosen in the specific municipality. An appropriation refers to the authorization and permission to incur obligations and make payments. In a Danish public sector context the Administration Act for the Danish municipalities prescribes that the municipal boards holds the final appropriation authority. This means that other administrative levels, whether it is the program committees or the individual service provider may not spend or obligate more than appropriated by the municipal boards. Actions which will lead budget holders to incur revenues or expenses not appropriated in connection with the yearly budget process may thus not be implemented until the board has granted the needed appropriation (§40 stk.2).

An appropriation does not mean an actual setting aside of cash, but represents instead the prescribed limit for spending in a specified period. Appropriation is thus the authorization for a specific budgetary unit to make expenditures or to create obligations, from a specific fund, for a specific purpose. Although the final authorization authority is held by the municipal board, the board can choose to devolve their budget authority to lower levels of governance. In this way the level of appropriation determines the scope of decision-making power in terms of how funds are to be spent and who are allowed to make decisions of budgetary importance. Through the specific level of appropriation, the board thus determines to which administrative level funds and responsibilities are to be devolved.

Danish municipalities have free range over how their organizational structure is and accordingly the specific level to which budgetary authority can be granted may be different in practice from one municipality to the other. A high appropriation level means that the municipal council funds on a general level without precise specifications or bindings. A program committee can for example be given an overall sum of funds which they subsequently can prioritize between different purposes and service areas as they choose. The board can also choose to assign more than one allotment to the committee thereby specifying which amounts are to be used for which purposes. Also appropriations can be assigned directly to the specific administrative level of the given service area or to the individual service provider, giving the specific administration or service provider the freedom to dispose over and prioritize how these funds are to be spent within the allotted appropriation. The competences and responsibility for the actual use and defrayments is thus placed on the level to which the appropriation is granted (Heeager & Olesen 2014:109).

A low level of appropriation on the other hand means that the municipal council leaves little room for how funds are to be spent. In principle the council can specify how much funds to be used on each line-item. The council can for example specify appropriations for books at each school or require that all transfers of funds be-

tween schools must be approved by the council before they can take place. For example, when pupils move between school districts within the municipality. The council can here decide that such transfers have to be approved before funds can follow the child. With a low appropriation level the council is thus involved in the decision-making process, potentially leaving few decisions at the hand of the program committee or local service providers (Heeager & Olesen 2014:149ff). The level and scale of appropriations thus comes to influence the size of the allotments and how tied-up resources are to specific purposes, an aspect which will be further discussed later in relation to the budgeting process.

The budgetary allocation model determined by the formula thus reflects the budgetary authority placed with the service providers, illustrating the scope of budgetary responsibility locally. Yet, it also demarcates the actual units for funding. In a school context this often comes down to a decision between whether it is the children living in the district or the children enrolled in the particular school. This is important, in that, the funding unit frames which pupils the individual school is responsible for and more indirectly which pupils in principle should be enrolled in the school. Based on a cost containment perspective it can, if districts are assumed to be similar in terms of socio-economic conditions, be feasible to allocate special need funds on the basis of the number of children living in a district rather than actual enrollments. In this way the allocation comes to be based on expectations of need, a decision which as discussed can incentivize budget holders to be cost effective. On the other hand it can also potentially lead to a decoupling of local decisions over service levels and budgetary responsibilities; a decoupling which is otherwise often not encouraged.

Albeit the formula at the outset illustrates the scope of financial responsibilities devolved, cost sharing arrangements are often implemented between the payer and the provider in order to share the financial risk. Such arrangements, Newhouse (1996) stresses, are often implemented in order to reduce the actual level of risk stemming from for example variations in numbers and severity of user' needs. Cost sharing arrangements, in other words, basically augment the main allocation and transfer risk, held by the budget holder, back to the payer; this for example in order to avoid that the costs of specific pupils with severe needs will overburden the individual school. Cost sharing arrangements can take many forms and vary in terms of coverage (Smith 2007a:107). '*Cost matching*' for example is a type of arrangement through which the payer/administration pays a proportion of all incremental expenditure beyond some threshold. '*Stop-loss arrangements*' entail that the payer, for some 'particular users', retain the full responsibility for all expenditure in excess of a fixed amount. Lastly, so-called '*carve outs*' revert the full financial responsibility for specific users or services to the payer (Smith 2007a:107-108). These 'carve outs' methods are often implemented when a small number of service users, with very severe needs, accounts for a large proportion of the unpredictable variation in expenditure. In a school setting the cost of pupils with severe learning disabilities

and handicaps is for example often covered by such arrangements. Special needs schools for example will often be excluded from the main allocation, with the total budgetary responsibility instead placed within the municipal administration. Cost sharing arrangements are thus important, in that, they come to change the base of the distribution. Any augmentations to the base allocation will introduce with it new incentives for the budget holder. Incentives which might have great effects on the behavior of these (Van de Ven & Ellis 2001). Any such arrangements should therefore be implemented with care and a clear understanding of the incited structures. In all, the specific level of appropriation and the prevalence of cost sharing arrangements thus affect how much funds are actually devolved, and through this the size of the final allotment.

Overall, as summarized in Textbox 4.2 this makes the specific appropriation level and funding object chosen as well as the scope of devolvement and the number and types of cost sharing arrangements important factors to consider when studying funding models.

- Appropriation levels
- Funding object – district children or pupils enrolled
- # and types of cost sharing arrangements

- *Textbox 5.2 Control components affecting the scope of devolvement*

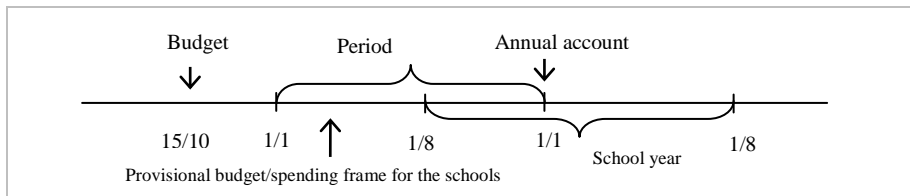
## 5.4. COMPONENTS RELATED TO THE BUDGETING PROCESS

One of the main functions performed by formula funding is, as argued by Smith (2007a:5), its contribution to the setting of a budget for a local service provider; a budget through which they are expected to fulfill their duties, either in the form of provision or purchasing of public services. But along with the setting of the budget comes a range of control related components which relates to the budgeting process more broadly. Including for example whether providers are allowed to make carry-overs or not, the definiteness of the spending frame, the type of appropriation given as well as the type of budget constraints placed upon the providers.

When the budget for the municipal accounting year is approved (no later than 15<sup>th</sup> of October) it contains the budget of authorizations for the following fiscal year as well as budget estimates for the next three. Appropriations are usually granted for one year at the time although some capital appropriations can be granted for multiple years and extended in the form of a sum of money set aside each year. The budget also outlines the administrative level to which the appropriation is given, the items it is to cover and the size of the specific allotment as well as whether the appropriation is given as a gross or net appropriation (Heeageer & Olesen 2014: 108).

Seen from a time dimension point of view one has to distinguish between the budget, an appropriation and the final/annual account. While, the budget *per se* is the *ex ante* estimation of future expenditure and revenues for a particular accounting period, appropriations, as described in the previous section, refer to the authorization and permission to incur obligations and make payments and as such do not mean an actual setting aside of cash. The final or annual account lastly expresses the actual expenditure incurred in the period relevant for the appropriation.

In a school setting, it is important to note that, the annual budget and the program year – here the school year – ascribes to two different time periods. The annual budget covers the calendar year from January to December, whereas the school year in Denmark begins in August, ending in June the following year. Thus, the appropriations are approved in October and the provisional budget or spending frame of a school is set at some point in the spring, prior to the upcoming school year (see Figure 4.1). The annual budget thus comes to encompass two different school years and with it possibly different funding bases. Depending on how sensitive the model is to *actual* changes in *activity* (e.g. enrollments) the spending frame of the school may have to be adjusted continuously throughout the school year. If adjustments are incorporated this will affect the definiteness of the preliminary spending frame and with it the uncertainty of the actual size of the final budget.



- Figure 5.1 Time dimensions relating to budget, appropriations and annual accounts in a school setting

The budget also outlines whether appropriations are given as a gross or net appropriation. This refers to whether the individual budget holder is allowed to spend resources not included in the budget. Appropriations are usually separated into expenses and revenues [bruttobevillings-princippet, gross appropriations], which means that additional revenues not appropriated in the budget may not be retained by the budget holder. Unspent funds must accordingly be returned to the administration or program committee. Budget holders are thus not allowed to spend any amount – not even unspent funds coming from the previous year – until appropriated in the form of a supplementary appropriation by the municipal board.

Appropriations can also be granted as net appropriations [netto-bevilling]. In contrast to the previous approach, this means that the amount appropriated is concerned with the net costs, that is, the difference between the expected expenses and revenues. In situations where actual revenues exceed that of the budgeted, service pro-

viders are here allowed to spend the surplus income on for example increased expenses. Albeit the efficiency argument could support such appropriations, gross appropriations are the standard choice. Ansbøl (2014:139) attributes this to the fact that the way in which increased revenues is obtained can be just as politically interesting as the way in which a specific appropriation is spent. Allowing providers to obtain increased revenues can thus from a political point of view be so vital that it must be made on a political level, for example in cases of increased user' fees.

Although the general principle of gross appropriations means that unspent funds must be returned, the board can permit the transfer of unspent funds to the following budget year. That is allowing service providers to save-up unspent resources or allowing that additional expenses can be financed by drawing on the following years appropriations. Such carryovers de facto expand the otherwise appropriation and budget time horizon and can allow providers to accumulate or run down fiscal balances. Such decisions inherently reduce the associated risk of the one year budget cycle, reducing the potential chock arising from sudden changes in activity or in the 'severity of needs'. Allowing carry-overs can thus be a way to instill a more long-term budget focus with providers thereby enabling them to accumulate larger sums which can be used to acquire items or activities which would otherwise not be possible within the one year budget. On the other hand, also deficits must be carry-forward. The precise scope of such carry-overs can, according to Smith (2007a:106), thus be very influential on the subsequent behavior of the budget holders, in that, it can be more or less attractively to spend to the limit.

Lastly, the type of budget constraints created is important. This refers to the payer's response to a lack of budget compliance from the part of the service providers. When setting the budget ex ante it is based on expectations of future demands. Ex post or during the course of the budget period it might become clear that the budget cannot be met. In this situation, Pedersen *et al.* (2006) suggest, there is in principle two possible responses for the payer – a hard and a soft. In a system characterized by hard budgetary constraints ('hard budgets') budget compliance is indispensable and providers will thus find it difficult to get remission for potential budget overruns (Barnum *et al.* 1995:30). Such systems are often characterized by tight budget control, a controlled intake of activity and specific sanctions following overspending. Hard constraints may therefore prompt a minimizing of costs, but may also affect the quality of services negatively if the amount allocated is inadequate.

Conversely in a model characterized by soft budget constraints ('soft budgeting') it will be comparatively easier to get 'forgiveness' for overspending. In this instance the spending frame will often be viewed more symbolic than binding, reducing the extent to which the budget will be used as a control tool. The intended efficiency will thus be threatened because the local management will experience few constraints on resource use (Barnum *et al.* 1995:30). A lack of sanctions will, according to Smith (2007a), generally affect the effectiveness of the funding model, in that,

service providers who incur no consequences for exceeding the budget might not be so inclined to enforce strict budget control. If the general feeling of the service providers is that they will be saved by additional allocations, their incentive to comply with the budget will be small. This threatens the credibility of the entire budgeting process. Not only does it run the risk of becoming a mere ritual (Smith 2007a) but it also jeopardizes the general perception of fairness, and may as a result affect the motivation of budget holders.

Overall, the four identified control components relating to the budgeting process, see Textbox 4.3, reflect the core dilemma when constructing funding models namely that the need for central control and transparency often come to clash with the desire for funds to be spent efficiently and with great local flexibility. Allowing carryovers or net appropriations may for example blur the insight into how many funds an organization actually has at its disposal; a factor which can easily undermine the otherwise informative and managerial value of the budget. Strict control in contrast also brings about undesired intentions in form of for example incentives to spend to the budget. A type of behavior which will advocate a more flexibility approach to be adopted (Christensen 2008:106)..

- Definitiveness of the spending frame
- Gross or net appropriations
- Carry-overs
- Type of budgetary constraints

- *Textbox 5.3 Relevant control components accompanying the budgeting process*

## 5.5. SCOPE OF LOCAL MANAGERIAL DISCRETION AND AUTONOMY

As discussed above, the local decision-making scope is at the outset affected by the type of appropriation given and the size of funding devolved. But it is also affected by a range of other decisions which relate to budgetary and education-matters. Overall, these considerations relates closely to the general discussions of the appropriateness associated with devolving responsibilities to lower levels of governance.

The literature on public sector governance has brought forward advantages and disadvantages associated with decentralization and the devolvement of responsibilities (see e.g. Pollitt 2005:377). Decentralization is often promoted as a way to ensure that decisions are made closer to users. This, it is argued, improves the *allocative efficiency* in the sense that services provided will be better matched to the preferences of users (Barankay & Lockwood 2007:1198). The local management will, due to their closer connection to the service users, possess deeper knowledge on

user demands and preferences, compared to the more distant administration. As a result local decision-making will be more responsive and better in-tune with the needs of these (Ouchi 2003). Similarly Glennester (1991:1269) argues, because current and relevant information on budgetary, pedagogical and academic matters is likely to be more present at the local level, it is generally desirable to anchor the decision-making power locally. Competition and quality improvements are, in this way, also expected to emerge through the enhanced autonomy scope, in that, providers will be encouraged to develop different types of services, opening up for a wider range of options for the users. From the perspective of users this will improve the possibility of finding services which match their personal preferences. Service providers will in turn have an incentive to do their best and tailor their services to local preferences in order to reduce the probability that users will seek services elsewhere (Heeager & Olesen 2014:164).

Further, by linking decision-making power and responsibility locally, accountability for spending can be created. This, Pollitt (2005:378) argues, will increase the flexibility by which funds are used and encourage the establishment of innovative solutions. Hence, although the enhancement of local decision-making power might imply loss of central control it is generally considered a necessary price to be paid (Levačić 2007). Combined with formula funding decentralization of decision-making, Smith (2007a:31) stresses, is thus expected to improve not only allocative but also *managerial efficiency*. In that, formula funding helps promoting efficient management in local organizations. Along the same lines, Levačić *et al.* (2000) argue, that formula funding when combined with decentralization of responsibilities improves the utilization of resources and direct resources to specific learning priorities, which in the end will promote not only efficiency in use, but also the general equity of results. Proponents of enhanced local autonomy in a school setting thus argue that, decentralization of responsibilities will enhance the equability, efficiency and effectiveness, as well as, the general responsiveness of the education system.

Decentralization of decision-making has however also been found to affect negatively the general equitability of public services, in that, the individual user may experience that they, because of their geographical location or specific needs, do not have access to the same levels of services as others. The individual service provider may, due to self-interests, lose interest in the broader system, leading to sub-optimization at the expense of broader efficiency and municipal concerns.

The size of the budget holders is in this context important in terms of the gains associated with decentralization. As the size of the budget holder decreases the need for prudent levels of financial balances increases, Smith (2007a:107) notes, ascribing this to fact that smaller organizations are more vulnerable to unexpected expenditure shocks. Small units may further erode the benefits intended from decentralization (Baxter *et al.* 2000), in that, economics of scale may become difficult to attain and transaction costs may also be greater in the smaller units. The individual

budget holder, here a school, might further come to experience difficulties in building up and retaining a critical mass of experts (Pollitt 2005:381). Larger organizations conversely come with the expectation of economic of scale to be created. That is, in terms of teaching where higher class averages are more easily obtained in bigger schools, but also in terms of building maintenance and cleaning (Blom-Hansen 2004:260). Economics of scale is however not automatic, and the intended effects may diminish after a certain point. Larger organizational units may even be accompanied by extra cost in terms of additional control and coordination systems, intended to ensure that the desired services are supplied at a satisfactory level. In larger organizations the lines of accountability for both employees and service users may further become somewhat unclear. Thus, a tension between creating units large enough to bear the budgetary risk (which could favor larger organizational units) while simultaneously securing a strong accountability structure (which often favors small units) arises (Smith 2007a:115).

An applicable mean to enhance the local decision-making scope is to allow budget holders to deploy line-item discretion. Line item discretion refers to whether budget holders are allowed to spend funds differently from what was otherwise appropriated in the budget. Proponents of line-item discretion accordingly argue that this is favorable precisely because the local management processes more relevant and current information. Line-item discretion is, according to Heald & Geaughan (1994), a way of reducing the risk connected tight central control and is often advanced as a tool to avoid transfers becoming a complex web of detailed grants and payments. Line-item discretion augments the prescriptions and appropriations and introduces what Heald & Geaughan (1994) term a 'veil of ignorance'. This 'veil' allows recipients to spend resources on a somewhat different pattern (provided of course that the statutory and/or contractual obligations are fulfilled) thus opening up for a more flexible use of funds together with a softening of the impact of the factors upon which the allocation was originally made (Heald & Geaughan 1994:268).

The local decision-making scope may however here be restricted by other factors such as for example municipal purchasing agreements, specifying where certain services or goods are to be purchased. Albeit, such arrangements are entered into with the purpose of coordinating public purchases so that efficiency and reduced transactional cost can be achieved, they can, from the perspective of the individual management team, come to limit the local ability to determine freely local services.

The local decision-making scope must however also be evaluated in terms of education related matters. Here the policy autonomy enjoyed by the service providers, understood as the ability to affect and decide upon the content of the services delivered, is important. Policy autonomy is, according to Smith (2007a:107), a vital factor in determining the risk endured by the service provider. In situations where service providers are subjected to hard budget-constraints combined with low policy autonomy an unexpected spending shock will leave the budget holder with two



choices; 1) It can continue to deliver the standard level of services, in which case it will overspend its budget, or 2) it can reduce its' standard of service. With full autonomy a service provider may be able to absorb imperfections in the funding formula by e.g. varying its levels of service. If however the payer leaves little room for discretion over the services provided or from the performance standards expected, the financial risk will increase correspondingly.

In a Danish school setting, a range of legislative decisions affect the local decision-making scope in terms of content and organization, and thereby diminishing the actual policy autonomy enjoyed. This includes legal requirements for the content of education, mandatory subjects, a minimum number of weekly lessons to be taught and ensuring that the teaching fulfills the Common Objectives for each subject as specified by the Ministry of Education. Service providers may further potentially be subjected to a broad set of objectives and requirements set by the local municipality. Public schools are thus made accountable to both central and local authorities, in regards to the content of education and the organization of it.

Textbox 4.4 summarizes the main control components, which together with the appropriation level chosen and the size of devolvement affect the local scope for managerial discretion and autonomy.

- Line-item discretion
- Purchasing agreements
- Level of policy autonomy

- *Textbox 5.4 Components affecting the scope of managerial discretion & autonomy*

## 5.6. QUASI-MARKETS & OPEN-ENROLLMENT AS MEANS TO COMPETITION

The creation of competition, in the form of offering users a choice of services, within a local market of providers, is often a favored mechanism for stimulating performance improvements. With formula funding, Levačić (1995) notes, comes the distinguishing feature of a “*separation of purchaser from provider*” and with it the potential for an “*element of user choice between providers*” to be created (Levačić 1995:167). In the Danish education system, competition and choice are introduced through for example publicly supported private schools. These receive, a part from permission to charge users' fee, a public subsidy per pupil enrolled for running expenditures. In 2013 the subsidy amounted to 72 % of the cost of a public school

pupil<sup>8</sup>. This de facto voucher system, Andersen & Serritzlew (2007:340) note, makes private schools a competitive alternative to public providers (see also Steuerle *et al.* 2000 on the effects of vouchers on competition).

Private schools must abide by the same standards as public schools, which mean that they must meet certain professional standards with respect to curricula and teaching. The choice of school so expanded enable parents to choose educational services based on specific pedagogical, religious, ideologies or political preferences (Andersen & Serritzlew 2007:353). In 2005 parental choice was further enhanced by an open enrollment clause in the Education Act which gives parents the possibility to choose any public schools, also outside the home-municipality. This, makes Nannestad (2004) note that the possibilities for creating ‘quasi-markets’ for education exist in a Danish context.

Through the separation of purchaser and providers a competitive provider or ‘quasi market’ for public services can be created. A market which is expected to counter and obviate some of the efficiency problems otherwise associated with public service delivery (see e.g. Glennester 1991; Bartlett *et al.* 1998). The markets are ‘quasi’ in nature because they differ from conventional markets from both a demand and supply side perspective. Also the payer is in effect an agent of central or local government (Le Grand 1991). Albeit the markets consist of independent institutions competing for contracts, these organizations are not necessarily seeking to maximize profit, nor are they necessarily privately owned. Likewise from a demand side perspective the consumer purchasing power is not expressed in money-terms. Rather it takes the form of an earmarked budget or ‘voucher’ confined to the purchase of specific services (Le Grand 1991:1260). Lastly, being publicly financed the markets are inevitably subjected to government intervention and regulatory frameworks (Cutler & Waine 1997:54). Indeed quasi-markets can be established in an education context, in that, increasing emphasis on enhanced user choice, made possible through open enrollment clauses, opens up for competition to be created.

Competition is from a theoretical perspective expected to bring forth a range of virtues, including decentralization, enhanced user choice, diversity of providers and not at least high quality of service (Cutler & Waine 1997:54). Not only is competition to extend user’ choice, giving these real power (improvement of the allocative efficiency). But competition is also expected to bring about a more equitable result, because, as Le Grand (1991:1263) words it; in the battle for resources “*the uncooperative, the insensitive and the recalcitrant will lose out, while the helpful, the considerate and the flexible will flourish*”. Competition, Heald & Geaughan

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<sup>8</sup> The government has decided to reduce percentagewise the subsidy grant given to private schools from 75 % in 2010 to 71% in 2014.

(1994:267) suggest, is thus a mean to discipline providers, making them more efficient and quality oriented (see similar arguments in Friedman 1955 on school choice, or Chubb & Moe 1999; Hoxby 2000; Neal 2002). Thus, through quasi-market for public services the lack of competition usually characterizing the public sector may be amended (Bartlett *et al.* 1998); creating with it, a more efficient use of economic resources (improvements in X-efficiency (Liebenstein 1966, 1973).

When studying the actual effects of competition the expected merits are however questionable and not necessarily obtainable. Le Grand (1991) e.g. stresses, that privatization may in fact create an upward pressure on costs. Not only will it require resources when setting up the needed infrastructure, enabling these markets to operate efficiently. Competing institutions will also tend to spend resources on advertising and other measures, intended to increase their market share. Any of such cost may not be wasted, but the cost has to be set against any eventual gains in efficiency. As quality of output moreover is difficult to assess focus on the quality or quantity of inputs will often arise (Le Grand 1991:1264), which as will be discussed may bring along unintended, adverse behavior from the part of the budget holder.

The ability of competition to improve allocative efficiency may further be questionable and come to depend on whether the market actually gives parents a wider choice of providers. The existence of competition in one location may not necessarily mean that new private providers will set up in more sparsely populated areas. Transportation vouchers are here often used as a tool to widen the choice of schools, at least geographically. In reality there may however still be considerable cost in terms of travel time and inconvenience, barriers which effectively restrict choice and therefore competition (Goodin *et al.* 1985). Appropriate information upon which informed decisions can be made is also needed in order to create the incentives for improved quality of service. Performance data Smith (2007b:290) notes, must exist; a type of data which will enable the creation of informed choice and the possibilities for benchmarking.

West & Pennell (2000) showed how information made available through the publications of performance related results guided parents in their choice of schools. The ‘threat of exit’ by parents, the authors note, encouraged schools to improve performance. Conversely, Gill & Booker (2008) questioned, whether the ‘*threat of exit*’ was not in fact a way to undermine the political responsiveness of schools. That is, promoting ‘exit’ over ‘voice’ for only the most active families, while the rest which encompass a population of “non-choosers” were left to the public schools. These pupils and their schools, the authors stress, might as a result be left substantially worse off if all of the most motivated and best-informed families have exited to schools of their own choice (Gill & Booker 2008:184). Similarly Fiske & Ladd (2000:250-51) conclude: competition does not “*lift all the ships*” but has a negative impact on schools with the lowest performing rates, since these schools may have difficulties in attracting academically gifted pupils. Studies on the effect of user

choice have revealed similar problems. Where open enrollment in general is viewed as a tool and important precondition for competition (Friedman 1955) the idea of completely free, unlimited enrollment does not exist. Because, as noted by Bartlett (1993:150) *“the door is firmly closed once a school [is full]”*. For ‘popular’ schools this may encourage an increasingly ‘selective’ admission policy, which can lead to cream skimming and increased inequality.

The effect of competition has also been studied in a Danish school context (see e.g. Nannestad 2004; Andersen & Serritzlew 2007). Similar to the studies cited above, these have also experienced difficulties in detecting the proposed positive effect of competition. Nannestad (2004) found that poor quality in public schools increased private school enrollments, without however finding a discernible effect back to the quality of the public services provided. This made him conclude that the mere existence of private providers may not in itself imply that there is actual competition. If the market is characterized by a sort of ‘market segmentation’ where private schools primarily cater to the needs of specific groups and minorities, the existence of actual competition is questionable (Nannestad 2004). Andersen & Serritzlew (2007) further found that private school competition did not improve the achievements of public school pupils. Instead, it was shown, competition in fact increased the public expenditure per pupil enrolled in the public school; leading the authors to suggest that: *“when faced with competition, public schools are not able to improve quality but expenditure per student increases”* (Andersen & Serritzlew 2007:353).

As can be seen, diverse opinions exist on the actual effect of competition, especially when it comes to determining the deeper effect on the quality of public services delivered (see e.g. Smith 1994; Smith & Meier 1995; Wrinkle *et al.* 1999; Bishop 2000). Severe methodological difficulties, relating to problems of endogeneity, cream skimming and choice of control variables have here, according to Andersen & Serritzlew (2007:336 or Jepsen 2002) affected the ability of the studies to uncover these effects. Further the mere existence of private providers may not implicitly entail the existence of a competitive provider market.

Competition however is often understood to be vital lever from a political point of view. Thus, the argument in this dissertation is that the characteristics of the specific market must be studied in order to determine whether the grounds for effective competition exist. Moreover, albeit not being a control component, per se, the general competitiveness of a market is also influenced by the number of users available to compete over. Accordingly, the following components, see Textbox 4.5, must be studied when evaluating the competitiveness of an education market.

- Type of private school competition
- Open enrollment clause
- Geographical dispersal of school providers

- Transportation costs to be covered
- Number of children

-     *Textbox 5.5    Relevant control components affecting the general competitiveness*

## 5.7. SYSTEMS FOR EVALUATION AND CONTROL

Although, formula funding is advanced due to its ability to transfer political objectives to providers, the specific level of funding is rarely connected directly to education results. Few attempts have been made to tie together directly levels of funding and performance outcomes. The American ‘*No Child Left Behind Act*’ of 2001 here constitutes an exemption, linking funding and pupil’ test scores requiring each state to assign rewards and sanctions based on whether schools made ‘adequate yearly progress’ in a given year (Figlo 2003). Therefore, the incentive for quality control must come from elsewhere. Here the payer’s objective is often to design a payment mechanism placing all organizations on a level playing field, giving, as noted by (Smith 2007a:145), them the funds needed to secure a specified performance standard so that “[p]erformance reporting and yardstick competition can then operate effectively, because any variations in achieved performance should be directly attributable to the actions of the management rather than a shortage of funding. Thus, albeit funding is not tied directly to education results, an incentive for quality improvements can nevertheless be created.

Because formula funding, as discussed above, by itself may not give direct incentive for upholding quality, but rather in fact may lead to a leveling down effect in terms of quality provided (Meisinger 1975) other types of control and accountability mechanisms are often implemented alongside formula funding models. This in order to ensure that budget holders uphold a continuous focus on the objectives and quality goals set by the payer. In fact, Smith (2007a:46) emphasizes, performance measures, quality standards or audits are vital and needed in order to ensure that the quality of service is not compromised. And from a political point of view Andrews *et al.* (2011) notes, information on the performance of public providers has become a basic political demand and tool for holding service providers accountable (see also Verbeeten 2008).

Accountability is here understood as the obligation to report, explain, justify and answer questions about how resources have been spent and to what effect. Thus it is seen as a vital mean to sustain or raise quality of local services. By subjecting service providers to external reviews the institutions are forced to examine their operations critically, with the hope of making the accountability measures work as regulatory devices. Thus, depending on the type of control conducted by the reporting institutions, accountability can be transferred to service providers. This is especially prevalent when combined with line-item discretion and enhanced local autonomy.

Problems and discussion however often rise in relation to actually measuring factors such as quality, efficiency and productivity in a public sector context. Often, as argued by Wilson (1989), it is easier to monitor or evaluate whether the ‘correct’ procedures have been implemented rather than reviewing the quality of the results produced. However as noted by Kaplan (2001) and Atkinson *et al.* (1997) qualitative performance measures are needed in order maintain (or improve) the long-term effectiveness of the organization. It is thus crucial, as argued by Vanbeeten (2008: 431), that the performance measurement system is able to identify (long-term) quality differences in output, ensuring that this information becomes an integral part of the performance measurement system (see also Henley *et al.* 1992). An overemphasis on ‘quantity performance’ (measures) may namely entail that the increase in quantitative performance (efficiency, number of units produced) will be achieved at the expense of quality performance (operational quality) (Henley *et al.* 1992; Carter *et al.* 1992) or innovation and long-term effectiveness (Newberry & Pallot 2004, 2005, 206; Newberry 2002).

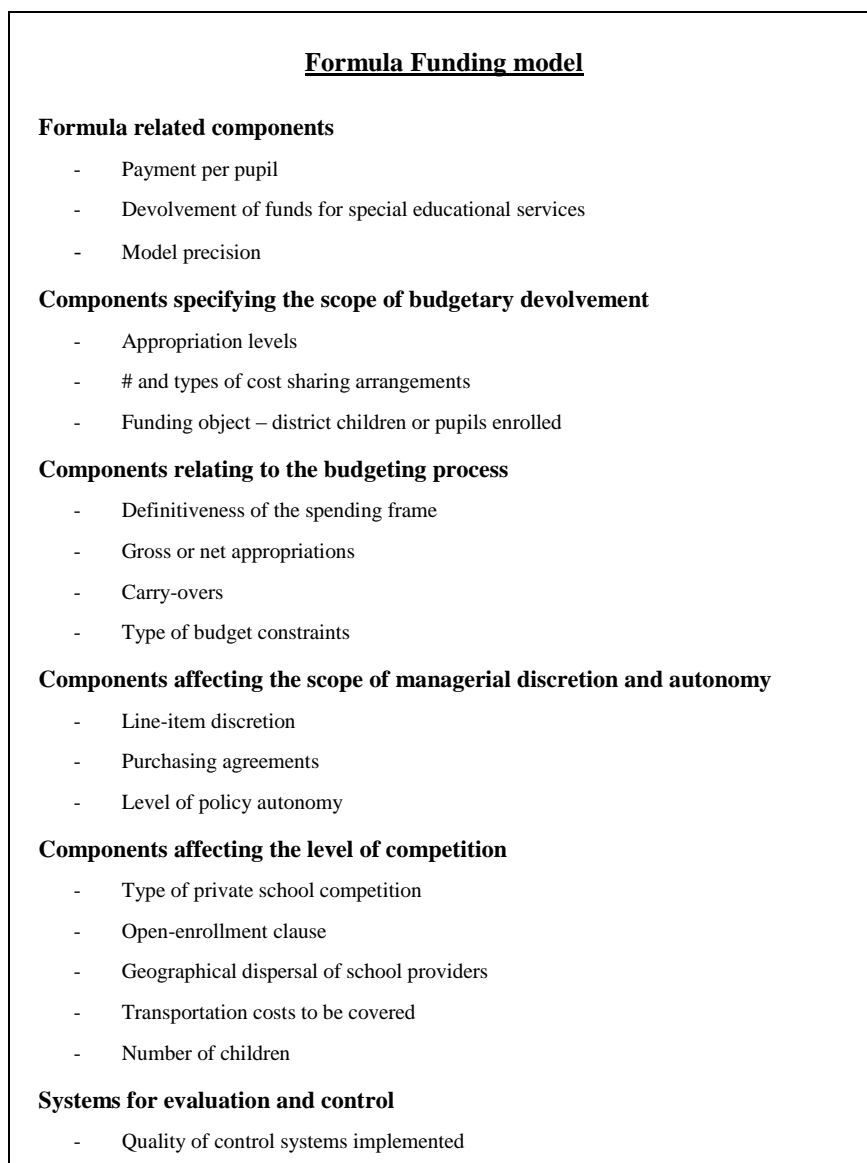
The effectiveness of the implemented control system thus comes to depend on whether there is concordance between what is understood to be quality and what is actually chosen as measures of quality, and likewise whether the depth of investigation clarifies the link between effects, activities and budget size (see e.g. Bjørnenak (2000) for an analysis of how a cost driver concept may be applied in a school setting).

- Quality of the control systems implemented

- *Textbox 5.6 Characteristics of the control systems implemented*

## **5.8. UNDERSTANDING THE FORMULA MODEL AS A PACKAGE OF CONTROLS**

This chapter has identified and discussed the technical components making up a formula funding model. Figure 5.1, summarizes these components, thereby, presenting what is proposed to be the package of controls. Although so far examined on an individual basis the components are to be considered as a unit or package, in that, they can be interrelated or even interdependent, that is, one component may dictate the design or specification of another. Thus, corresponding to the understanding of what constitute a package of control, brought forward by Grabner & Moers (2013), the control components of a formula funding model represent the complete set of control practices in place, regardless of whether they are interdependent and/or the design choices take interdependencies into account. Implying that the management control package is composed of a set of management control systems and/or a set of independent management control practice, addressing possibly unrelated control problems (Grabner & Moers 2013:408).



- *Figure 5.2 The control components making up the overall package of controls*

In practice various combinations of the control components are likely to be found, as particular mix of controls may vary between models due to freedom of decision-making of Danish municipalities when it comes to matters of organizing, prioritizing and funding. Depending on the specific choices made by the payer, intended or not, each component can take on different forms. For example, the specific level of appropriation may differ. However no municipality can decide not to specify the

level of appropriation, nor can it refrain from specifying whether line-item discretion or carry-overs are to be allowed or not. Thus, it is argued, the above identified components are an inherent part of any formula funding model. They are thus proposed to be mandatory, albeit not unchangeable or predetermined. The components however are proposed to constitute the basis *package of control*, making up a formula funding model in a Danish public school context, albeit they of course are not claimed to be all-encompassing, in that, a funding model in practice may consist of other control components as well.

The actual mix of control components will however influence the relative importance and effect of the individual sub-element, in so far, that specific design decisions accompanied by its incentive structures may obscure the effect of other components. In a situation characterized by a low level of appropriations, a decision to allow line-item discretion over the remaining funds may influence the local behavior less, than if the municipal board uses a more general approach to appropriations; since the former appropriation level by default has reduced the local decision-making scope. Likewise, allowing line-item discretion in a situation characterized by hard budgetary constraints may reduce the relative budgetary risk placed on providers. Whereas a decision not to allow carry-overs will make the effect of the budgetary constraints relative harder as the margin for compliance becomes narrower. The specific mix can consequently produce both negative and positive synergy (Jaworski 1988). The latter to such an extent that *complementarity*, in the sense that the presence of one element increases the value of others, can be created (Milgrom & Roberts 1992, 1995; Ennen & Richter 2010). However negative synergy can also occur, in that, the intended effect of one element is decreased by the presence and design of another.

All in all, this underlines the importance of viewing the formula funding model as a package of controls and, as argued by Pedersen *et al.* (2006:125), the full set of incentives brought upon services providers can *only* be understood when studying the components as a unit. The package-notion accordingly facilitates and ensures that all relevant components and incentive structures are taken into account and studied when analyzing the behavioral effect of the funding model. Consequently, the study of formula funding models cannot be confined to an analysis of individual control components. Rather, in order to understand the full set of incentives associated with a specific model the entire package of controls has to be addressed. If not, important incentive structures may be over-looked and as a result misspecifications may occur.



## CHAPTER 6. INCENTIVE STRUCTURES & BEHAVIORAL RESPONSES

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### 6.1. INTRODUCTION

The policy objectives of public sector governance revolves around ensuring equity of and access to high quality of services and likewise the promotion of effective and efficient uses of resources, and if appropriate cost containment. The incentive structures created by the formula funding models are here vital, in that, specific design choices may encourage different behavioral responses potentially in or out of line with the set objectives. Some incentives can be said to be intended and proper, serving to ensure the fulfillment of the payer' objectives, yet others however are more unintended and even adverse, and can potentially thwart the overall intentions of the model. A precondition for understanding the full set of incentives associated with a given formula model is thus that the incentives structures associated with the individual control components are well understood.

This chapter discusses the incentive structures of formula funding models. The point of departure is the previously identified rationales for implementing formula funding, i.e. pursuits for efficiency, equity, accountability, although questions of quality and productivity will also be included. The discussion does not claim to represent an exhaustive list of associated responses. But contains the main issues discussed in the context of funding and behavior, drawing upon relevant literature rooted in different research streams, including management control literature e.g. Covaleski *et al.* (2007) and Locke & Latham (2002), literature on formula funding (Smith 2007a), and when relevant literature from health care such as Hood (2006, 2007) and Pedersen *et al.* (2006).

### 6.2. BEHAVIORAL THREATS TO EFFICIENCY, PRODUCTIVITY AND QUALITY OF SERVICE

Productivity, efficiency and quality are high priority outcomes in the delivery of public services and a formula funding model may here contain incentives which promote such intentions. Yet, as will be discussed next the funding model may also bring about responses which will thwart these objectives.

#### 6.2.1. PRODUCTIVITY AND ACTIVITY LEVELS

Incentives for productivity can be said to be beneficial if they encourage providers to become cost-effective and innovative in their service delivery. If however, providers in their quest to minimize cost and uphold a high level of productivity restrict

specific users from the services, this is not the case. The funding model must consequently incentivize budget holders to deliver the proper level of services needed.

The fundamental difference between case and capitation payments here creates different incentives. The part of the model which takes into account enrollments comes to resemble a case payment approach and depending on how sensitive it is to *actual* enrollment levels a direct link between local activity/output and the subsequent funding received can be created. The size of the pupil dependent allotment is hence very influential, in that, the larger the budgetary effect of an extra enrollment is, the more vital it is for the provider to uphold high enrollments. This case payment inspired approach will consequently tend to stimulate demand, as long as the payment received is larger than the costs associated with the extra intake. Thus, as long as the cost associated with an extra increased is covered this should in principle incentivize providers to compete over pupils. Combined with a competitive provider market where providers by default cannot be sure that all potential users will enroll in the school, a lower level of enrollments will have immediate effects on the size of the allotted budget. Accordingly, providers will not be concerned with investing in preventive measures or otherwise seek to keep in check local demand (Smith 2008), but rather be prompted to focus on enrollment numbers.

If parts of the funding are allocated through capitation payments, e.g. funds indented to cover special needs education, opposite problems can arise due to the placement of risk. Because linked with capitation payments are incentives for prevention and cost control. Incentives which potentially can thwart the motivation to keep a constant focus on enrollments and further endangering that all have the same access and that the needed services will in fact be delivered. With capitation based funding providers are expected to cover the needs of all potential users within the allocated budget and since, budget holders receive the same amount regardless of actual enrollment numbers the payment consequently offers no incentives to stimulate local demand. In fact, Smith (2007b:289) argues, it might even encourage service providers to depress the use of services as a mean to endure the strong budgetary risk.

From a broader welfare economic point of view cost containment is beneficial if it prompts providers to implement cost-effective initiatives. But if legitimate service users are denied access or their needs not sufficiently met, this type of behavior is problematic. In the context of special needs education, capitation payments have been found to affect the delivery of local services. Studying the effect of a state capitation reform Dhuey & Lipscomb (2009) revealed how the new capitation payment system not only changed prior patterns of use but also affected the local incentives for identification and diagnoses of needs. Again, such behavior can be said to be proper if leading to more precise responses to needs, but will probably be deemed unacceptable if it incentivizes budget holders to depress needed services. Also in health care examples have found where capitation funding shifts local attention from potentially adverse focuses on the number of cases treated, to a focus on prevention

of communicable diseases, for which there are clear prevention opportunities (Smith 2008:5). Thus, designed properly the fixed budgets, associated with capitation payments, are likely to stimulate preventive measures, and a desired reduction in demand for treatments.

There are thus arguments for and against a strict focus on service activities. A blind increase of activity may lead to unwanted services, because this will uphold or create a larger budget base and the spending of excessive resources on attracting potential users. Hence, an incentive for prudent resource utilization and cost-control must be created. It is therefore crucial that the drivers of costs are 'legitimate, that is, not driven by adverse action by service providers, e.g. over identification of needs or excessive levels of service delivery. An important payer' concern is here that the actual causes and drivers of activities can be verified. In terms of enrollments this is unproblematic as enrollment numbers are subjected to a high degree of accuracy and are easily checked. Whether prudent behavior is prompted may here rather depend on how closely the model takes into account changing enrollments. If however part of the special needs education budget is based on case payments problems concerning fraud or manipulation can arise (Smith 2007a:46-48). The existence of asymmetric information between the payer and provider, together with potentially different and more subjective diagnosis, may here incentivize the budget holder to provide unnecessary services if reimbursed with an appropriate case payment or it can lead to attempts to up-code pupils in order to receive the higher possible payment per pupil.

### **6.2.2. EFFICIENCY & COST CONTROL – UNIT OR TOTAL COST?**

Creating virtuous incentives for efficiency and cost control are crucial from a broader welfare economic viewpoint. The specific level of appropriation here becomes important, in that, a high appropriation level in combination with wider local discretion is expected to have implications for managerial efficiency. Not only is these factors expected to better the utilization of resources, as the knowledge possessed by the management is assumed to be more in tune with user needs and preferences, but when coupled with competition it can motivate providers to do their best through the tailoring of services to local preferences (Glennester 1991).

The two funding methods again bring with them different incentives, reflected in the focus and type locally conducted cost control. Under case funding budget holders usually have an incentive to reduce unit costs. This, Smith (2008:28) notes, is however only so if surpluses can be retained by the budget holder. Simultaneously, case payments will give few incentives for cost containment of total cost levels. This, Aas (1995:210) argues, is due to the counter incentive created for increased activity. The incentive to focus on total cost is conversely prevalent with capitation based payments. Health care literature shows how capitation schemes have been implemented as a mean to change incentives from a focus on each activity, to instead a focus on the whole pathway, i.e. the total episode of hospital care (see e.g. Aas 1995). Capitation payments thus tend to incentivize budget holders to reduce overall

cost, in that, the budgetary risk associated with the generating of costs is placed at the local level. Put differently, providers are, under the assumption that they are allowed to keep unused resources, given a financial incentive to minimize costs, in order to maximize the difference between revenues and expenditure. Thus, Barnum *et al.* (1995:30) argue, capitation payments can induce providers to become innovative in introducing cost-reducing measures or implementing lower-cost alternative treatment settings and prevention measures. As such, the devolvement of funds, either through case or capitation payments, is expected to lead to a more efficient outturn, albeit with different focuses and end results.

In the context of school funding an important aspect of cost control is that of deciding on the number of pupils per class. Since the number of pupils per teacher is the main determinant of the economic costs of education, class size is an important managerial concern (Krueger 2002:7). Some funding models, as explained, allocate funds based on classes and here the specific size of a class may not be as influential, compared to a model based exclusively on the number of pupils enrolled. In fact it may even be preferable to establish an extra class as this will trigger extra funding.

Much academic attention has been directed towards answering the question: what constitutes appropriate class size? Leading to studies on efficiency, cost-effectiveness and quality in the context of class sizes. Some studies have concluded that there are no significant effect of larger class sizes on pupil' outcomes (Hanushek 1998; Hoxby 2000), whereas others have demonstrated that smaller class sizes enhance pupil outcomes (e.g. Angrist & Lavy 1999; Krueger 1999, 2003; Sander 1993; Urquiola 2006; Jepsen & Rikvin 2009). Yet, other studies have found that small class sizes are important for specific groups of pupils and in specific subjects and also from the point of view of the teachers (see e.g. Akerhielm 1995:229). This has made Hanushek (2002:39) note that class size discussions have come to represent an important political battlefield, where the appeal of class size reductions depends on the perspective of the specific stakeholder. A principal of school for example will often see larger class sizes as means to create economics of scale, whereas politicians will tend to use the introduction of class size restrictions as a convenient policy instrument for gaining voter support (Hanushek 1999:131; 2002:62). From the perspective of the teachers smaller class averages will often be closely linked to quality with the argument that smaller class sizes will offer the teacher more time per pupil. But, Hanushek (2002:29) argues, higher averages will at the same time also be a mean to ensure a continuous demand for teachers.

### **6.2.3. QUALITY SKIMPING OR DEMAND INDUCED QUALITY**

Albeit having touched upon the fact that formula funding on its own gives no incentives for quality improvements, the specific reasons for this must be studied further. As emphasized by Smith (2007a:117), most formula funding schemes run the risk of compromising the quality of service, defined as the models effectiveness in securing desired standards. In fact, both case and capitation payments have been found to

induce providers to skimp on the quality of the service provided. As pure capitation payments assign a set fee per pupil, regardless of their actual needs, the providers may become incentivized to suppress activities or skimp on quality in order to handle the budgetary risk placed on them due to this uncertainty of demand and needs. Case payments likewise may lead to decreasing quality. Indeed, Smith (2008:30) notes, case payments rarely create incentives for considering the ultimate outcomes of the pupils, which means that the providers accordingly often are incentivized to stint on the quality of service delivered. This is especially prevalent if no quality constraints are placed on them. Regardless of the payment method, additional control systems must therefore be implemented in order to ensure that services are delivered to the standard expected. As discussed such measures can include performance measures, quality standards and audits (Smith 2007a:46).

Quality incentives can however also arise from a demand side concern, that is, in response to competition. Competition is, as discussed, expected to incentivize service providers to improve quality in order to better their competitive capacity. By default this will of course be most effective under case payments as providers here are compensated for their actual enrollment/activity levels. In this context, the ability of public providers to respond to competition from private schools becomes important. If unable to change their way of operating or if decisions on curriculum, teaching methods and class sizes are determined centrally, the ability of the individual public school to counter competition may be hampered (Chubb & Moe 1980). In consequence Glennester (1991) argues, devolvement of local managerial decision-making is a necessity, although not a sufficient condition, for a true quasi market to emerge, and with it, for competition to have a positive effect on quality of services. As discussed, the mere existence of private schools may not imply enhanced competition, especially in cases where informed choice cannot be made or where the market is characterized by ‘market segmentation’, the connection between competition and service quality may not be realized. When private schools primarily cater to the needs of specific groups or minorities the main reason for choosing such private ‘special purpose’ schools will often have little to do with the quality of public schools. Hence only creating weak, if any incentives for quality improvements.

### **6.3. BEHAVIORAL THREATS TO EQUITY AND EQUAL ACCESS**

Creating equitable distributions of and ensuring equal access to services are distinct public sector concerns. As discussed formula funding is closely related to the pursuit of equity and improvements in allocative efficiency, in that, formula funding can ensure that the allocation of resources is in line with societal preferences, that the individual needs are properly addressed and that a wider choice of providers can exist. Allocative efficiency may here emerge through the possibility of greater parental choice made possible through open enrollment, enabling them to send their child to the ‘right school’ (Bradley & Taylor 2002:298). Adverse incentive structures can however also be created. As discussed below, incentives can come to com-

promise the pursuit of equity and equal access and any such deviations from the original intentions will, as argued by Smith (2007b:277), imply a reduction in the effectiveness with which funds are used and therefore a loss of efficiency.

### 6.3.1. CREAM SKIMMING

Research, conducted mainly in an American health care context, analyzing the effect of payment types on user treatment has led to the study of the concept: *cream skimming*. Cream skimming refers to the (de)selection of particular users at the expense of others. Studies have shown how more 'lucrative patients' have been treated at the expense of patients with severe needs (Akerhof 1970; Ellis 1998). Cream skimming can take on many forms, e.g. treatment selection ('horizontal' cream skimming) where only the more lucrative and less severe users are treated or through 'vertical cream skimming' where patients are selected within the ailment group (Levaggi & Mintefiori 2003).

Similar behavior has been found in a school context (Gennester 1991; Bartlett & Le Grand 1993; Figlio & Stone 2001). In fact, Whitty (1997:14) notes, cream skimming is a major issue in most education markets, and represents, according to Le Grand & Bartlett (1993), the biggest threat to equity in quasi-markets. Because with cream skimming there is a clear danger that socially segregated systems may be created (Bradley & Taylor 2002:299), which may hamper the general equitability and equal access to services. In particular if test scores are used as benchmark of education quality, schools, which have successfully cream-skimmed academic gifted pupils, will appear relatively more successful. This may make them seem more attractive to potential users and more likely leave them with a somewhat easier and more straightforward task compared to the rest. The danger of cream skimming, Pedersen *et al.* (2006:66) emphasize, is thus a vital factor to consider when designing funding.

Regardless of whether the allocation is based on capitation or case payments, formula funding will when combined with open enrollment in principle induce service providers to cream skim users with the lowest associated cost. With capitation funding this is especially prevalent because service providers have to do with a fixed budget, based on expectations of needs and activities. The budget holders may accordingly be incentivized to cream skim pupils with the lowest costs in order to reduce the high budgetary risk placed upon them. Case payments come with the same set of incentives, especially if the payments attached do not compensate fairly user needs. Thus inadequate funding will in general prompt cream skimming behavior and in turn potentially affect which pupils are enrolled (Smith 2007a).

Whenever variations in expenditure exist, budget holders will have strong incentive to seek out private information about potential users, in order to enhance the credibility of the estimated costs (Van de Ven & Ellis 2001). This incentive is reinforced as the unit of devolution decreases. Not only will the relative budgetary risk be greater for smaller units, but the more devolved a system becomes, so does increase

the potential for asymmetric information (Smith 2007a:112). As, smaller units are more likely to possess extensive private, informal information about potential users, making cream skimming more likely to occur.

Two options are proposed as means to reduce cream skimming. The first suggests the introduction of pro-competitive regulation, which according to Barros (2003: 420) involves implementing open enrollment rules in combination with case payments. The second relates to the precision by which actual needs are captured through e.g. adequate risk adjustment schemes including refinements of the capitation payment, or through an imposition of some sort of high-risk pooling (see e.g. Newhouse 1998; van de Ven *et al.* 1998). On one, side the precision by which actual needs are met by is important for ensuring that all potential users are equally attractive to the providers. However, the finer the gradation becomes the more the payment comes closer to mere reimbursement of providers' actual expenditure. A type of funding where the other rationales for formula funding may disappear.

In Denmark cream skimming is limited by law, in that, all public schools are obliged to enroll any pupil belonging to the district who applies for enrollment. Thus, institutional rules influence the local decision-making scope and public schools can therefore not refuse home-district pupils, making them so to say "educators of last resort" (Bergström & Sandström 2001:41). Open enrollment possibilities however affect slightly the possibility of cream skimming, in that, schools are not obliged to enroll pupils from other districts if the specific class is full. Private schools are however not bound by the same institutional rules, which means, that they more freely can influence which pupils are to be enrolled. This is often noted as important factor when comparing the conditions under which competition between public and private providers is to take place.

Private schools engaged in cream skimming are often accused of affecting negatively the quality of public services provided. In as much as private schools are focused on attracting the most scholarly able pupils, leaving the less able – and more demanding – to the public schools, the average performance of public schools will, it is said, thus be hampered. Moreover, Nannestad (2004:4-6) stresses, this may further increase the expenditure per pupil, as the proportion of pupils requiring special attention and support increases. Other studies have further indicated that the academic results of the scholarly weaker pupils (pupils mainly associated with a lower socio-economic strata) is improved by the presence of pupils with stronger educational backgrounds (see e.g. Coleman *et al.* 1966; Levin 1998; Hoxby 2000; Hanushek *et al.* 2001). This makes Nannestad (2004:6) conclude that the exit (or lack) of scholarly strong pupils has a negative impact on the average performance levels of the public schools (due to a 'composition effect') and also on the individual performance levels among those pupils who remain in the system (due to a 'behavior effect').

### 6.3.2. UP-CODING AND SHIFTING THE COST OF USERS

Adverse behavioral responses can also arise in connection to the questions on, who is to hold the budgetary responsibility of particular pupils and how much is the individual provider to be reimbursed for a particular pupil. Attempts by the budget holders to shift the cost of otherwise devolved responsibilities are, according to Newhouse (1998), a common mean through which budget holders can reduce the relative magnitude of budgetary risk. The cost of particular users can here be attempted shifted onto the users or other agencies/budget holders. Cost sharing arrangements may facilitate such behavior, in that, these arrangements open up for the responsibilities to be shared or shifted fully to other organizational unit. In this context Dhuey & Lipscomb (2009:23) showed how pupils with disabilities were actively referred to particular services thereby transferring the budgetary responsibilities and thereby diminishing the relative budgetary risk incurred. Such incentives for deterring users can arise regardless of whether case or capitation payments are used, because both methods will tend to 'penalize' providers who enroll users with severe needs, than covered by the accompanying payment. In both cases making it less attractive to enroll such pupils. The precision by which differences in actual needs are taken into account thus again becomes crucial for avoiding such behavior.

Case payments bring forward yet another type of adverse behavior, namely that of *up-coding*. That is, seeking the maximum case payment possible for each user. Up-coding has in general been observed in areas where front-line professionals enjoy considerably autonomy (e.g. in police and health care) and where independent verification is difficult (Hood 2006). In health care the case payments attached to the DRG (diagnosis-related group) system have been found to encourage more intensive treatment of patients if this leads *"to an upgrading in the severity of the DRG, and therefore increased reimbursement"* (Smith 2008:5). Similar in American insurance literature it has been demonstrated how hospitals have "up-coded" Medicare patients to more highly reimbursed diagnoses (see e.g. Silverman & Skinner 2004; Dafney 2005). The information asymmetry, between payer and providers, will here in general make the verification of actual user' needs difficult, potentially leading service providers to use this asymmetry in order to seek the largest possible budgetary base.

In a school context up-coding is particular prevalent in connection to special needs education and support. Here the asymmetry of information and the danger of more subjective and 'less medically' determined diagnosing can come in to play (Parrish 2002). As argued by Marsh (1998:121) *"an allocation system which provides additional resources to any pupil who can be certified or measured as meeting the criterion for additional resources provides an incentive for parents and the school to secure the necessary identification for that pupil"*. With the result that such a system over time will be likely to generate an increase in the number of pupil eligible for additional funding. In relation to this, Dhuey & Lipscomb (2009) showed how the change from case to capitation payments removed the link between funding and local decision making over disability identification and placement. As school dis-



tricts which prior were compensated for additional special needs services supplied, now in the new capitation payment scheme did not receive extra funds when identifying children with disabilities, or when providing additional services (see also Banks *et al.* 2015).

## **6.4. BEHAVIORAL THREATS TO EFFICIENT MANAGEMENT AND ACCOUNTABILITY**

The process of budgeting and with it the incentive structures created are by default important aspects to consider. Through the process, managerial efficiency can be created and local accountability for budgetary and education-related matters can further emerge. But just as it were, with the other objectives the specific component design can also here come to compromise such goals.

### **6.4.1. BUDGETS AND RIDGIDITY**

The importance of budgets in coordinating activities and providing appropriate incentives for employees has led to an ongoing research focus on budgeting, budgets and behavior (see e.g. Covaleski *et al.* 2003:10 or Birnberg *et al.* 2007 for reviews of the literature). The notion of budget participation has in this context been especially studied, with psychology-based research focusing on determining the effects of budgets and participation on the employees' mental states, behavior and performance (Covaleski *et al.* 2003:28). Participation has in general been found to be positively correlated with motivation and/or performance (see e.g. Hofstede 1967; Milani 1975; Kenis 1979; Merchant 1981). In one of the first studies on budgets and participation Argyris (1952, 1953) found that a lack of participation combined with pressure to achieve the budget could create cognitive inconsistency in the mind of the employees. This, he showed, resulted in stress, interpersonal conflicts and distrust leading to dysfunctional behavior in the form of gaming, reduced effort and poor communication (see also Hansen *et al.* 2003; Neely *et al.* 2003:23).

Critics of budgets and budgeting have argued that budgets in general can create rigidity, limit co-operation and reduce the ability of the local management to come up with creative solutions. If budgets for example become a goal in themselves – a sort of 'fixed performance contract' – Hope and Fraser (2003:10) note, this can lead to an overemphasis on short-term cost control and top-down authority. Factors which have been shown to encourage gaming and to affect negatively the motivation of employees.

Formula funding is, as discussed, proposed to create a type of decentralization which offers service providers the opportunity to respond to local circumstances, to innovate, and to seek out economies of scale (Smith 2008:6). Not only will such measures improve the managerial efficiency, but it will also enhance the local sense of responsibility for how resources are actually spent. If however the municipal

board uses a low level of appropriation or devolves only few funds, few decisions will be left at the hand of the local management; making them in a sense mere administrators of the externally made decisions. This will in practice restrict the flexibility of the budget holder and the budget may thus come to act as a strait-jacket on managerial action. Certain activities which are more beneficial in terms of the objectives of the organization may as a consequence be ignored due to an absence of a budgetary provision or other decision may likewise be made purely because of one. Specific expenditure may as a result be incurred merely because they are included in the budget and not because the actions are required; thereby foregoing the efficiency benefits otherwise associated with decentralization.

The specific payment type may also create different levels of accountability in terms of ensuring that the individual pupil actually receives the resources needed in accordance with that pupil's needs. Whereas payment methods which allocate individual funding to identified pupils based on the pupil's severity of need ensures that the pupils receive the resources they are assigned, capitation based funding brings with it questions of local accountability, in that, it can be difficult to track funds thereby also ensuring that they are actually used in relation to the children for whom additional resources were intended (Meijer 1999; Riddell *et al.* 2006; Banks *et al.* 2015). Gaming is here likely to occur if budget holders can affect adversely the size of future budgets, e.g. attempts to maintain high expenditure levels in order to protect future budgets. Excessive spending may thus occur as a mean to justify current spending (Smith 2007a:110). In a school setting this occurs if specific services or tasks can only be upheld if activity levels remain stable or increase. Special needs services for example may when combined with case payments motivate providers of such services to retain as many pupils as possible in these services as a mean to uphold the current budget base.

Gaming/adverse behavior in the form of 'spending to the budget' is affected by whether net or gross appropriations are used. Gross appropriations mean that the individual provider is not allowed to retain unused funds, thus giving these no direct incentives to increase revenues by for example obtaining grants from private foundations. Further, if unused funds are retained by the payer in order to balance over-spending elsewhere it may leave little incentives for providers to leave any funds unspent (Smith 2007a). Net appropriations on the other hand allow providers to spent additional surpluses, making it profitable to come up with creative solutions. It may however also bring about unintended costs not otherwise authorized by the administration (Christiansen *et al.* 2014:120). Allowing carryovers may here be a way of lessening the effects of gross appropriations and the one year cycle attached to these. Combined with line-item discretion, carryovers can open up the local scope for decision-making and incentivize a more prudent use of resources. Allowing service providers to keep unused funds can thus be a mean to ensure that they are not induced to 'spend to the budget'. That is, not spending the entire budget provision in fear that unused funds will be 'lost' to the center (Pedersen *et al.* 2006:118).

Allowing carryovers further means that budget holders remain exposed to the budgetary risk of unexpected deficits. A long-term budget focus may thus be created where cost-effectiveness will be rewarded while deficits must be explained and handled locally. The incentive to be innovative will of course still be affected by the ability of providers to influence how unused funds are to be spent. Thus if the municipal administration retains the decision-making authority over such unused funds there is, as Pedersen *et al* (2006:118) argue, little local incentive to create surpluses. The size of the budget holder is in this context further important, in that, larger providers will less be vulnerable to random *per capita* variations and changing circumstances compared to smaller providers.

#### 6.4.2. TARGET SETTING AND MANAGEMENT BY OBJECTIVES

Management by objectives, understood as an approach where specific performance objectives are mutually agreed upon and the progress toward accomplishing them are periodically reviewed, has become important in the governance models applied by Danish municipalities. Municipal policy setting, Heeager & Olesen (2014) note, increasingly seeks to link quality targets and results to the general budgetary situation of the municipality, thereby making the budgetary frame visible and connecting it to the political objectives. In order for this to work the general objectives must be translated into specific actions which are to be understood at a local level. If not, the specific implementation may be hampered due to a lack of understanding of how and why specific objectives are to be implemented.

In this context, targets and their effects are widely studied. It has been shown that the use of targets and goal setting as means to steer behavior has powerful behavioral effects (Manzoni 2010:22) on the motivation and attention of employees towards the specific goal. The use of goals, it is argued, increases the effort and persistence put into achieving them and affect employee' actions indirectly by inducing arousal, feeling of discovery, and/or the use of task-relevant knowledge and strategies (Locke & Latham 2002; Mitchell & Daniels 2003; Pinder 1998). As suggested by Locke & Latham (2009:19): "*A goal to which a person is committed increases effort, prolongs persistence, and cues people to search for strategies to attain it*". Review articles on goal setting (Locke & Latham 2002; Rodgers & Hunter, 1991) suggest a positive relation between clear and measurable goals and performance, although as acknowledged by Locke and Latham (1990) task difficulty (which is associated with difficult to measure goals) reduces the impact of clear and measurable goals on performance. As with budgetary related goals, holding service providers accountable for specific educational objectives may thus create unintended behavioral responses.

Critics of goal setting (see e.g. Degeorge *et al.* 1999; Jensen 2001; Schweitzer *et al.* 2004) on the other hand stress the unintended behavioral consequences of goal setting by showing how subjecting employees to targets can focus their attention so narrowly that important features of a task are overlooked. Specified short-term goals

may consequently be overemphasized while more long-term and maybe less clearly specified goals are neglected (Ordóñez *et al.* 2009). Short-term political attention directed towards specific cases may also hamper the ability and desire of providers to maintain a more long-term strategic focus. This is indeed common if the reward for improving productivity and efficiency is limited while the consequences of failure are severe. In such cases the incentive for securing efficiency and innovation will be small. Thus, even though accountability tools can open up for benchmarking of results thereby encouraging the fulfillment of policies they may also affect adversely the behavior of service providers if not used properly.

In a public sector context Hood (2006) identified three types of gaming or (adverse) strategic behavior arising as a result of goal setting. Namely: a ratchet effect, a threshold effect and output distortion/manipulation of the reported results. Whereas the latter pertain to misrepresentation of performance levels and/or the adoption of unethical methods to boost performance, the ratchet effect (gaming) occurs when managers restrict performance well below their production-possibilities in order to secure that the future requirements and targets are not tightened up. The threshold effect, Hood (2006) argues, further occurs in instances where a uniform output target is applied to all units in a system. For example he showed, how pupil-attainment targets on test scores, in a school setting, lead teachers to concentrate on a narrow band of marginal pupils close to the target threshold in order to increase the chance that the overall target would be met. This meant that less attention was given to those at the extreme ends of the ability range, or to aspects of education which lay beyond preparing the pupils to the tests (Hood 2006:518). No incentives were thus given in terms of excellence, which led Hood to conclude that the use of such targets actually could encourage top performers to reduce the quality and quantity of their performance to the minimal required level necessary to meet the target.

Accountability tools in the form of audits or performance evaluations of examination results and national testing thus bear with them the potential for adverse behavior (see also Bevan & Hood 2006). The effectiveness of these quality control tools will depend on the ability of the payer to keep in check the results of local management and with the sanctions incurred for not meeting the objectives further being important. If no sanctions are incurred this can affect local efforts, as discussed in relation to budgetary targets.

## **6.5. PAYER INDUCED TECHNICAL TRADEOFFS**

This chapter has discussed how the incentive structures of formula funding models can bring with them incentives which are not coherent or in-line with the objectives of the service area. Despite the powerful efficiency, equity and accountability arguments for allocating funds through formula funding, the chapter has shown how adverse and unintended incentive structures may affect local behavior to such an extent that this threatens the pursuit of the original goals. This departure arises in

general as a result of unintended and adverse behavior. Yet, departures from these rationales can also emerge more deliberately, through active choices arising from payer-specific tradeoffs. As has been briefly touched upon tensions can, in practice, arise between the objectives of efficiency, equity and accountability. As discussed by Smith (2007, 2008), these tensions can only be resolved through specific tradeoffs, which by default will come to diminish the ability of the formula to secure the very same objectives.

The technical accuracy of the formula (intended to promote efficiency and equity) may for example be countered by the desire for simplicity (intended to promote political accountability). As such, Smith (2008:7) notes, there is implicitly in many equity criteria's: *"the understanding that equity will be pursued 'up to a point', but that it must to some extent be moderated by considerations of cost and efficiency"*. Likewise a tension may arise between the parsimony in the use of risk adjusters and the need to model spending needs sensitively. Simple funding mechanisms are often preferred because they can be more readily understood and thereby promote accountability. Pure equity will as a result often not be pursued at all costs, but will depend on the payer's specific intention in relation to efficiency and accountability.

The specific balancing of simplicity and sensitivity of funding will thus often be a key role for the funder when determining the specific formula design. In practice, Smith (2007a:72) notes, differences in people's personal production function (i.e. *the link between the level of public services consumed by an individual and the outcomes achieved* (Smith 2007a:14)) imply that most funding mechanism seeks to secure a balance between pure equity and pure efficiency. The specific allocation thus often becomes a tradeoff between the two, since pure efficiency is only consistent with the widely used equity principle (those in equal need should have equal access to services) *if and only if* individual's 'need' is defined in terms of marginal capacity to benefit from the public service (Smith 2007a:64).

In sum, the departure from the otherwise intended objectives can accordingly emerge as a result of both unintended and more intended actions by the payer. Unintentionally, the design of the control components can create unintended behavioral responses which will affect the ability of the funding to encourage the desired behavior in line with the set objectives. While more intentionally the individual payers' equity concern may also lead to departures from pure equitable and efficient allocations.



## **CHAPTER 7. FRAMEWORK: FORMULA FUNDING MODELS AND MANAGERIAL PRACTICE**

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### **7.1. INTRODUCTION**

So far, the previous two chapters have analyzed and discussed the components of formula funding models and the incentive structures associated with the individual control components at a somewhat separate level. From a management control perspective it is however important to understand the effect of the full set of incentives brought forward by the total package of control. Thus, it is not enough to understand the separate effects of the individual control components. Rather what is needed are broader measures or characteristics which can capture the full design of the funding model and with it the full behavioral impact of the package of controls in place.

I propose that two control characteristics, the level of budgetary risk and the level of competitive pressure brought upon providers through the model, are the two central levers affecting behavior in the context of formula funding models. Arising respectively from an internally and an externally source of uncertainty/risk these two control characteristics are accordingly proposed to be the main factors which influence local managerial practice, understood as the options, actions and tasks available to the local school management when performing their job. The configuration of the two control characteristics is proposed to come about through the specific design of the package of control in place. Based on the understanding of viewing the funding model as a package of control, the idea is thus, that the joint effects of the components will determine the actual level of competitive pressure and the level of budgetary risk brought upon the providers by the funding model.

A framework for the study of formula funding is thus proposed which ties together model design and behavior. From a management control perspective the framework can be used as a tool to clarify and analyze the managerial practice created through specific mix of controls. Moreover, if another mix of control is wanted the setup can also be used as a mean to understand how a re-design of a control component can come to affect the local managerial practice. The framework can thus be used to understand current practice as well as the effects of re-designs.

The chapter is structured as follows. Firstly, Figure 6.1 summarizes the findings from Chapter 5 and 6, underlying the general relationship between political objectives, the formula funding model components, its inherent incentive structures and the resulting managerial practice. Then, the two proposed behavioral related control characteristics are presented, while section 7.3 analyzes how the identified control components shape and affect respectively the level of budgetary risk and competi-

tive pressure. In the final part of the chapter the proposed framework is discussed focusing on the four types of practice emerging from this setup.

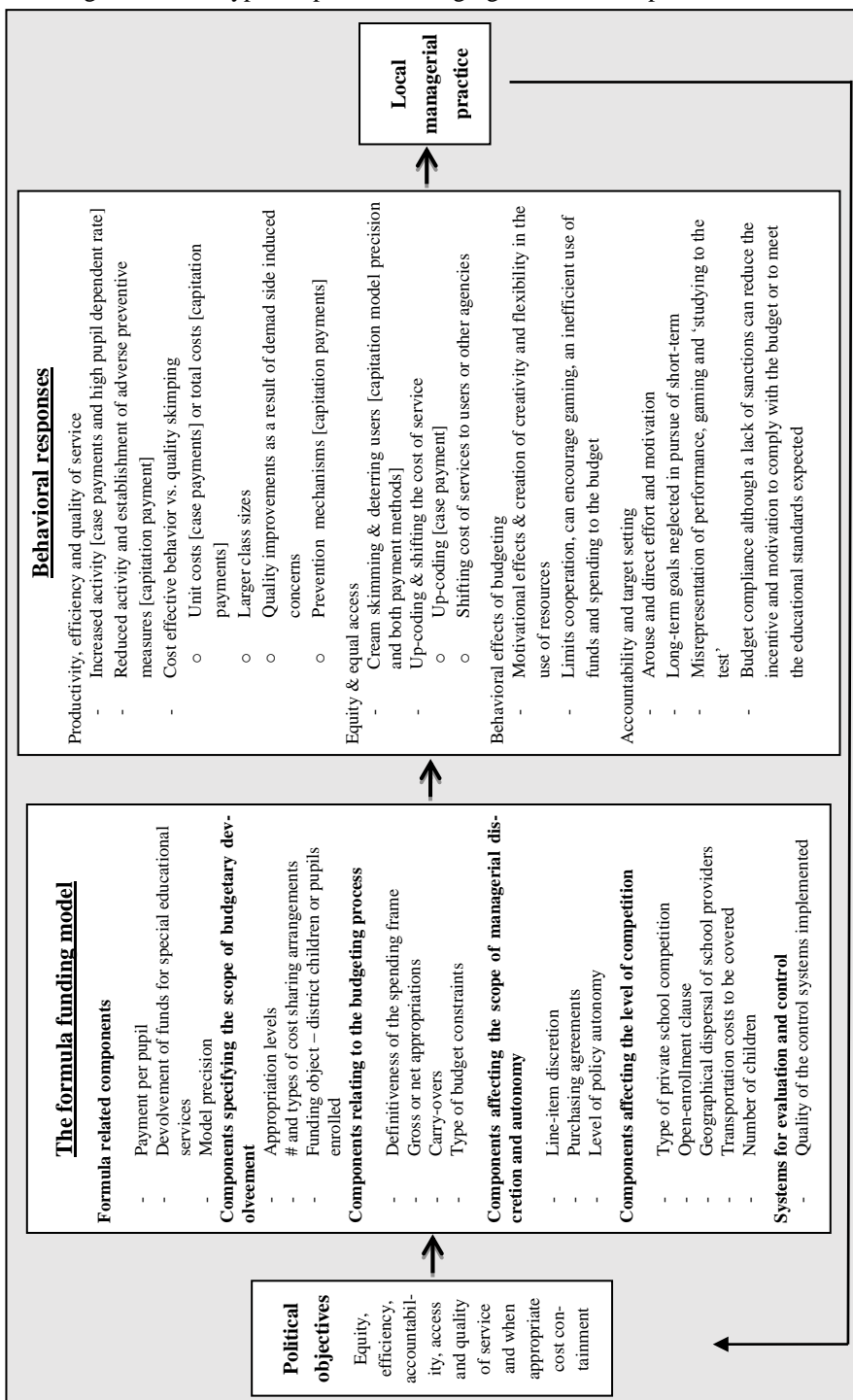


Figure 7.1 General findings from Chapter 5 & 6 relating to formula models and the incited behavioral responses



## 7.2. CONTROL CHARACTERISTICS DECISIVE FOR MANAGERIAL PRACTICE

The two central control characteristics are presented, respectively an externally exerted uncertainty brought upon providers as a result of the competitive pressure created and a more internal source of risk referring to the level of budgetary risk inflicted on providers.

### 7.2.1. BUDGETARY RISK

The first control characteristic proposed as a vital lever for local behavior is the *level of budgetary risk*. Budgetary risk is here understood as the unpredicted variation in outturn expenditure from forecast expenditure and is according to Smith (2007a: 100) an intrinsic feature of public services. If expenditure requirements can be predicted with certainty, the problem of setting budgets would be trivial and the task for the devolved entity that of merely carrying out agreed policies. The existence of budgetary risk thus ensures that the funding becomes more than a mere reimbursement system and is accordingly a mean to encourage providers to operate prudently and efficiently (Rice & Smith 2001).

It is however important to note that although budgetary risk is considered a prerequisite for prudent resource utilization, excessive risk can lead to unintended adverse responses from the part of a budget holder. Finding a satisfactory distribution of risk between payers, purchasers, providers and users thus becomes important in the designing of a formula funding model. This balancing of risk is vital as a lack of budgetary risk at the one hand will destroy the intended incentives for financial discipline whereas excessive risk on the other hand can lead to unintended adverse responses from risk adverse budget holders. Budgetary risk thus becomes important for ensuring that incentives for financial discipline are given, albeit not to the extent that providers will be induced to act in ways where they adversely will seek to avoid the risk or seek to shift it to other agencies or service users.

Measured/evaluated on a scale ranging from high to low, the specific level of budgetary risk is thus proposed to be a vital lever for local managerial practice.

### 7.2.2. COMPETITIVE PRESSURE

The second control characteristic which is proposed to be decisive for local managerial practice is the *level of competitive pressure* imposed upon the service providers.

Whereas budgetary risk relates to an internal source of uncertainty the competitive pressure relates to an environmentally created uncertainty. Schools operate in what can be characterized as a fairly stable and structured environment. Although legislative changes may take place at continual rate, the effect of the legislative environ-

ment is the same for all participants. The main cause of uncertainty will thus stem from the competitive pressure which exists on the market.

Competition is considered important, in that, it is assumed to improve the efficiency by which services are delivered. Through being subjected to competition service providers are encouraged to minimize cost, that is, to deliver services most efficiently. Even the threat of competition it also expected to incentivize providers to improve the quality of the delivered services (see e.g. Glennester 1991; Levačić 1995; Boyne 2003). But the specific level of pressure is important as an excessive pressure can prompt providers to spend resources on advertising and other activities intended to increase their market share. All of such costs may not be wasted or harmful, but the amount of resources involved has to be set against any eventual efficiency gains. Moreover, as the quality of output can be difficult to assess this will often lead to a focus on the quality or quantity of inputs. The balancing of competition thus also becomes important in order to ensure that incentives for financial discipline are given, albeit not to such an extent that the providers are induced to act adversely in order to counter the pressure to compete.

Again, measured/evaluated on a scale ranging from high to low, the level of competitive pressure created is thus proposed to be vital lever for understanding the resulting behavior of service providers.

### **7.3. CONTROL CHARACTERISTICS AND FORMULA FUNDING MODEL DESIGN**

The next two sections analyze the effect of each of the in Chapter 5 identified control components on respectively the level of budgetary risk and the level of competitive pressure. The impact of each component is discussed separately and its effect is visualized in Figure 7.2 and 7.3. Yet, also possible synergies are included in the discussion. The analysis thus seeks to show how component design affects the actual shaping of the two control characteristics. However, it is important to remember that the actual configuration of the two control characteristic will ultimately be a consequence of a joint effect of all control components.

#### **7.3.1. BUDGETARY RISK AND COMPONENT DESIGN**

Ranging from high to low the level of budgetary risk is determined through the joint effect of the design of the control components making up the funding model, see Figure 7.2. The actual level of budgetary risk is thus made up by a range of factors which together determines the scale position of a particular funding model.

The choice of payment method places different levels of budgetary risk with the service providers. The part of the model which takes into account enrollments will by default resemble a case payment method and the larger the pupil dependent pay-

ment is the higher the induced risk *vis a vis* variations in activity. With case payments though some of the demand risk is transferred from the providers to the payer, leaving the budget holder exposed only to the risk of decreasing activity levels (Smith 2007a:101). The magnitude of budgetary risk will be especially significant in situations where local cost structures include a high proportion of fixed costs to which the provider is committed. With case payments the budget holder also bears the case intensity risk, i.e. risk emerging from variations in educational needs not covered fairly by the case payment. The precision by which the model meets actual needs/variations in population characteristics thus becomes important as the lower the precision is, the more risk will be placed with providers, and vice versa. Regardless of whether this lack of precision is unintended or arises as result of a simplicity/equity trade-off this it will still affect the local budgetary risk.

As already remarked, the larger the actual payment per pupil enrolled is the higher the associated budgetary effect of respectively enrolling or dis-enrolling a pupil will be. In this context, it is however important to consider how definitive the spending frame actually is. That is, how accurately the model in fact takes into account fluctuations in *actual activity*. Is the spending frame for example adjusted as enrollment changes occur? If no adjustments are made the spending frame becomes definitive thereby resembling more a capitation inspired approach, in turn affecting the otherwise incentives associated with case payments and with it the actual level of risk. On the other hand, if adjustments are incorporated this affects the overall definitiveness of the spending frame, thus leaving providers exposed to an uncertainty stemming from not knowing the size of the actual spending available. Being risk adverse the providers will therefore prefer an early assessment of the final frame compared to potential reimbursement of extra intake.

Capitation payments, which as discussed, reimburse providers on the basis of expected activity, on the other hand, place the full budgetary risk of changes in activity with the providers. These must accordingly not only manage the uncertainties arising from demand within the fixed budget, but also the variations in actual user's cost. The capitation payment approach naturally comes into play when district children rather than actually enrolled pupils are chosen as the object of funding. Building the allocation on district pupils increases the risk placed with the providers, in that, the allocation necessarily comes to be based on expectations of use. On top of this, a potential decoupling between local decision-making and budgetary responsibility may further be created, if education and budgetary-related decision-making is not linked, in turn enhancing the budgetary risk.

The specific level of risk is also influenced by the size of the devolvement of special education cost. Generally, the more funds that are devolved the larger the budgetary risk incurred by providers tends to be. This means that if the devolvement of special educational funds is low, leaving a vast part of the cost to be defrayed by the administration, the relative budgetary risk reduces. If a vast part of the funds is kept at the

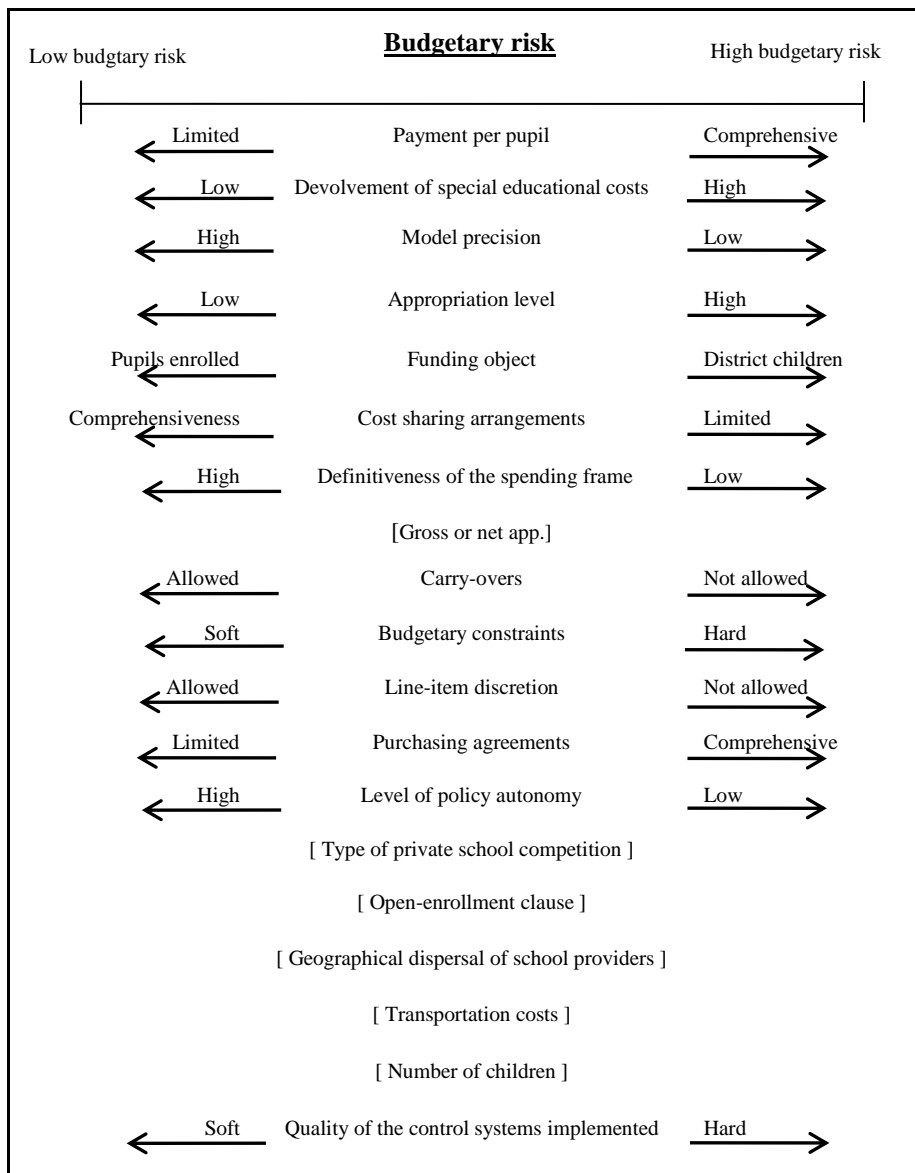
administration level, only to be allocated outside the funding scheme, it will become difficult for providers to take stock over how much funds is actually to be at their disposal, hence affecting the level of perceived risk. This, ties in with the level of appropriation and use of cost sharing arrangements. The more prevalent the use of cost sharing is the more financial risk will be transferred from the providers to the payer. Furthermore, as the level of appropriation determines to which administrative level funds and decision-making power is to be devolved, this also becomes important for the budgetary risk incurred. A high level of appropriation will tend to increase the local budgetary risk. While a lower level will entail that budget holders have less to say over how funds are to be spent, making them to act more like administrators. Thus, the fewer funds which are devolved the more reduced the decisions scope available will be, thus reducing the level of budgetary risk.

The ability to exert control over how resources are to be spent across line-items is important in determining budgetary risk. The management is with line-item discretion able to freely decide how the allotted funds are to be spent, thereby reducing the associated risk of having to operate within the fixed limits prescribed by the budget. The policy autonomy is in this context also important. With full autonomy a service provider may be able to absorb imperfections in the funding formula by for example varying its levels of services, thus reducing the associated risk. If however the payer leaves little room for maneuver over; which services to be provided, from where budget holders have to buy goods or from the performance standards expected the financial risk will increase. The associated sanctions for not meeting the targets (budgetary or education-related) here also come into play. If no sanctions for breaching the goals of the budget are expected, the associated budgetary risk is low. Conversely, it will be high in situations of 'hard budgeting', that is, where providers cannot expect to be saved by later allocations. The type of budgetary constraints will thus in combination with the policy autonomy enjoyed have a substantial impact on the risk endured.

The decision to allow carry-overs will de facto expand the otherwise implemented budget time horizon, thus reducing the associated risk of a one year cycle. Potential shocks from changing activity levels or in severity of needs can thus be smoothened, making the carry-overs to act as a safety net under the providers. As the spending margin here is larger the associated budgetary risk will be reduced. Finally, the type of quality control conducted is also important. If for example, the allocation of funds is connected to the accomplishment of specific quality standards, there will be a direct connection between quality control and budgetary risk. A lack of fulfillment will here increase the budgetary risk. If funds and quality is not directly connected, the more long-term effectiveness and influence of the quality control system on the budgetary risk endured will depend on whether this can be used to ensure competition and informed choice.

As for the five last components (the type of private school competition, open enrollment clause, the geographical dispersal of school providers, transportation costs

and the general number of children) their relative effect on the level of budgetary risk is expected to be limited. As their individual effect can be difficult to isolate the components are shown in brakeage in Figure 7.2. In combination however they may affect the ability of the providers to forecast their actual spending, creating thereby budgetary risk. This may especially be prevalent in highly competitive situations.



- Figure 6.2 The impact of the control components on the budgetary risk created

### 7.3.2. COMPETITIVE PRESSURE AND COMPONENT DESIGN

Again, ranging from high to low, the level of competitive pressure is determined through the joint effect of the design of the control components making up the formula model. The actual competitive pressure is thus, as above, made up by a range of factors which together determines the exact scale position of a particular funding model.

In terms of payment methods, capitation and case payments create different incentives for competition to emerge. Similar for both payment types is however that the general model precision intended or not, becomes important. If needs are not covered fairly by the model this may affect the general willingness of enrolling particular types of pupils. At least those whose needs are not covered by the associated payment. Case payments, which as discussed earlier, apply to the pupil dependent part of the allocation attaches a payment per pupil enrolled, thereby rewarding providers directly for a stimulation of demands. The larger the payment attached to the enrollment of an extra pupil, the greater the incentive for competition will be since the budgetary effect of new and dis-enrollments will increase. Case payments may as a result stimulate competition for users, at least for those whose needs are covered by the associated case payment.

Capitation payments, on the other hand, are not tied to actual enrollments; Bringing along an incentive to depress service activities as providers are expected to cover all changes within the allocated budget. Competition for pupils may thus decline since providers in the short run will not be reimbursed for attracting extra pupils. In this context, the competitive pressure will be influenced by whether district pupils are chosen as the funding object, in that, this capitation based approach will reduce the competitive pressure as the direct connection between enrollment levels and budget sizes is lost. Yet, this choice of funding object may however lead to a decoupling of responsibilities which may counter the reduced willingness to compete, giving a constant incentive to enroll pupils.

The relative competitive pressure will also be affected by whether appropriations are given as gross or net appropriations. If separated into expenses and revenues [gross appropriations], then no direct incentives for competition is given, because additional revenues, not appropriated in the budget, cannot be kept by providers. If however appropriations are granted as net appropriations then the amount appropriated is concerned with the net costs (the difference between the expected expenses and revenues) which means that providers are allowed to spend the surplus income on for example increased expenses; giving incentives for increased competition.

The appropriation level implemented is in general important for determining how smoothly funds can be transferred between school districts, for example in case of pupil transfers. If increased activity is compensated without specific approval, the incentive for increasing enrollments will be greater affecting upwards the competi-

tive pressure. The same argument applies for the definitiveness of the spending frame. If few adjustments are made the competitive pressure will be limited in that schools by default cannot be sure to be compensated for actual extra enrollments, thereby affecting the willingness to enroll additional pupils

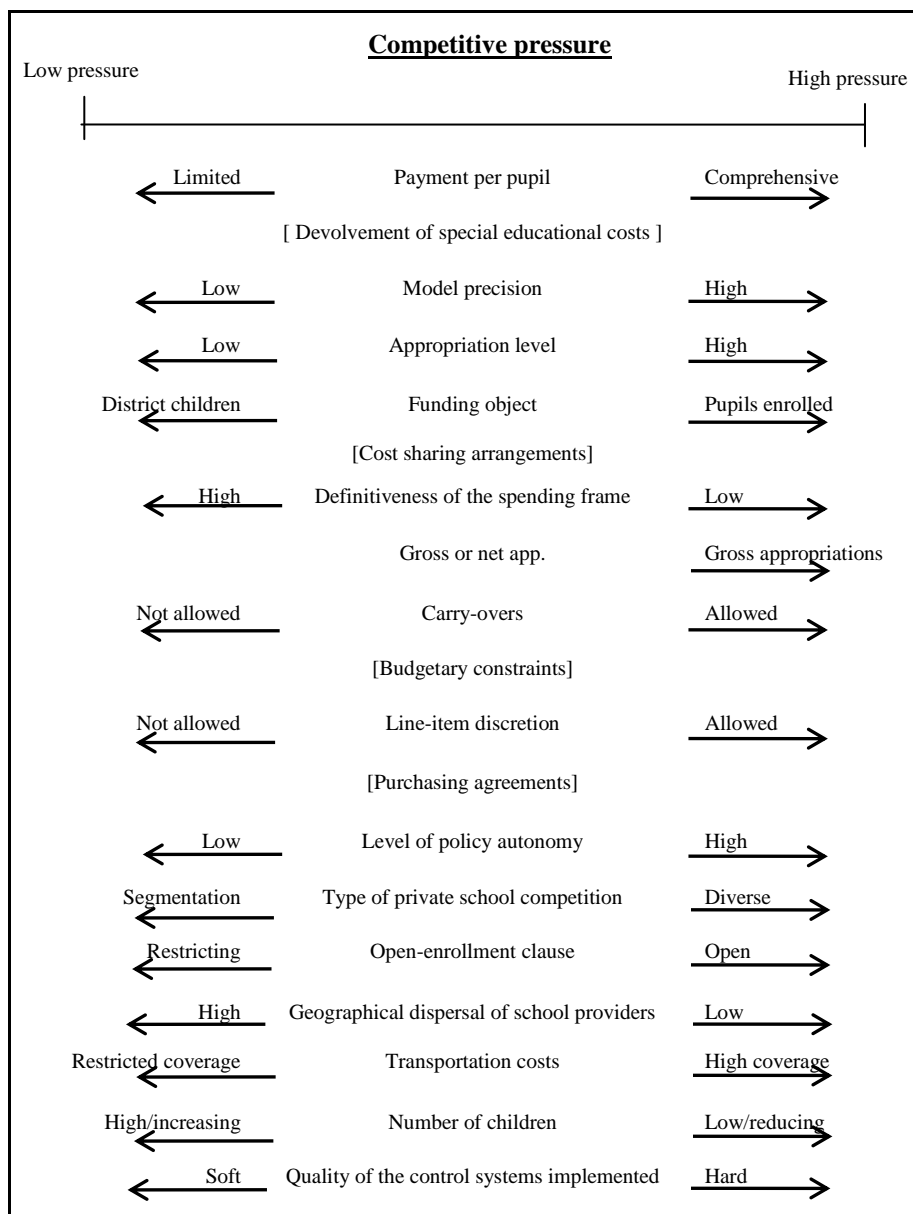
A competitive market consisting of both private and public providers can, as discussed, be established by tying a payment to each pupil enrolled. In the public school context competition can be encouraged by opening up for free-enrollment, that is, free choice of providers. The mere existence of private providers does, as earlier mentioned, not by itself imply that a competitive supplier market exists. If a market for example is characterized by a type of 'market segmentation' where private schools cater primarily to the needs of specific groups or minorities the actual competitive pressure will tend to be relative low. Similarly the relative effect of vouchers for the purchase of education services at private schools will in this context be moderate. If however the market is not characterized by market segmentation, the use of such vouchers will, as long as the payment received covers the extra expenses, from a competitive point of view, be a way of creating competition for pupils.

Parallel arguments go for transportation vouchers. The more extensive the coverage of the cost of transportation is the wider the choice of schools, at least geographically, will be. In principle this will therefore increase the possibility that pupils choose other providers than their home-district school. The geographical location of service providers may however in reality hinder actual free choice, thereby affecting the general competitive pressure created.

Managerial discretion in terms of how resources are to be spent across line-items and objectives is also important, in that, it can enable providers to develop different services tailored more specific to the demands of the users. This opens up for a wider choice of services, which from a user's perspective will enhance the possibility of finding services which match individual preferences. The competitive pressure will thus increase, in that, service providers are expected to be incentivized to do their best and tailor their services to local preferences in order to diminish the chance of their services be de-selected. Here, the ability of the service providers to respond to the competition is important. If the policy autonomy is so low that they are not able to respond to competition, by for example changing their ways of operating, the competitive pressure from providers, not restricted by the same conditions, will be greater. The effectiveness of the quality control also becomes important since this can lead to benchmarking information, which can guide parents in their choice of school. The publication of quality related results thus does affect the competitive situation of a school.

Finally, albeit not a control component *per se* the general development in pupil numbers may influence how present the need to compete for pupils is. If pupil numbers in general are decreasing the need to be proactive in attracting pupils will be

greater, compared to situation where the pupil population is high and growing. As for the last three components (devolvement of special educational costs, budgetary constraints and purchasing agreements) their relative effect on the competitive pressure is expected to be limited.

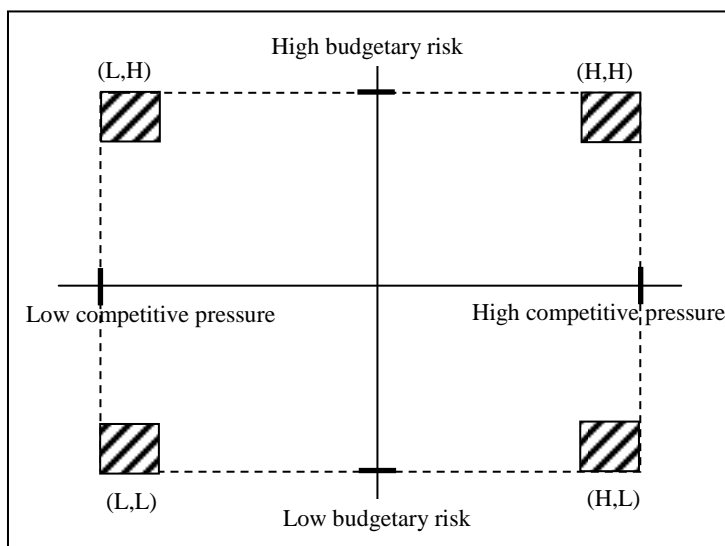


- Figure 6.3 The impact of the control components on the competitive pressure



## 7.4. FRAMEWORK FOR MANAGERIAL PRACTICE

Combining the two control characteristics connected to a specific formula funding model they can be visualized through a point in the rectangle depicted in Figure 7.4. Here the spectrum of the competitive pressure is marked on the horizontal axis, whereas the vertical axis contains that of the budgetary risk. Focusing for simplicity and clarity on the “corners”, that is, the four possible combinations of high (H) and low (L) levels of competitive pressure/budgetary risk, together with a relevant neighborhood of points, this is proposed to give rise to four types of managerial practice, each of which will be presented in the next sections.



- Figure 7.4 Framework for managerial practice

### 7.4.1. LOW COMPETITIVE PRESSURE/ HIGH BUDGETARY RISK

The set of combinations in the second quadrant, Figure 7.3, is characterized by a low competitive pressure and high budgetary risk. The low pressure means that the school management is operating more or less as a monopolist. There may be other school providers but the private schools in the area will mainly be catering to a specific segment of users. The funding model is however constructed so that the budget holders are exposed to high level of budgetary risk.

In terms of ensuring productivity and high activity levels the low competitive pressure gives no direct incentives for the management to focus on retraining or attracting pupils. Incentives to focus on quality improvements will consequently not stem from a demand side concern. The providers consequently have no eminent need to or incentive for trying to commercialize or improve the quality of services as a mean to for example improve their market share. Cost effectiveness and the need for

productivity will rather stem from the high budgetary risk, which will prompt the providers to create cost-effective and innovative solutions. Quality improvements are thus to come about through such measures.

The pronounced risk may however adversely induce providers to skimp on the quality offered. Accordingly, instead of implementing cost effective solutions the stark risk may reverse the quest for quality. The latter incentives are especially pronounced since the effect of quality skimping, due to the low competitive pressure, will have no immediate effect on enrollments and thus on the size of the allocated budget. Quality skimping will thus so to say only be a mean to reduce the relative risk placed on the providers.

An overall tension between motivations for efficiency improvements and more adverse types of behavior can further arise due to the stark risk brought upon providers. Because, the service provider bears a high level of budgetary risk they could be incentivized to seek to shift the cost of users to other agencies or seek to erect barriers for entry of particular users. Moreover, service providers could even seek to up-code particular pupils as a mean to lessen the relative budgetary risk if such behavior is possible. These behavioral responses will not only reduce the level of risk, but it will further better the ability of the budget holders to meet the budgetary standards expected. Adversely however, any of such behavior will jeopardize the efficiency by which funds are spent and potentially adversely affect the equitability of the model and where pupils are able receiving their education.

From the perspective of the payer the effectiveness of the entire model thus comes to depend on whether these are able to catch unwanted behavior and to induce providers to refrain from skimping of the quality of services provided. Benchmarking of both educational and budgetary result must thus be possible, thereby countering the otherwise limited demand side pressure and instead inducing providers to improve or change the type and content of the services delivered.

#### **7.4.2. LOW COMPETITIVE PRESSURE/LOW BUDGETARY RISK**

The set of combinations in the third quadrant is characterized by a low competitive pressure and a low level of budgetary risk. The low competitive pressure means that the providers are essentially acting more or less with near-monopoly, experiencing very little or no competition from either private or public schools. Similar to the discussion above, this will consequently give few incentives for demand-side-induced incentives for quality improvements as immediate enrollment changes, due to dissatisfaction, are less likely to occur.

The lack of these demand-side induced incentives is critical as the low budgetary risk placed upon providers further gives no incentives for service providers to improve the quality of service or to come up with cost-effective solutions. The low budgetary risk also gives few incentives to ensure proper resource utilization, hence

efficiency gains can be difficult to achieve because such immediate concerns are not likely to present locally on a continuous basis. Potentially, this may lead to the delivery of excessive services which from a broader public point of view may not be deemed appropriate since there are no direct budgetary incentives to constrain costs.

Moreover, service providers may still also be induced to behave adversely through attempts to both up-coding and deterring users. Both types of behavior will not only make the budget base even more stable and secure, but the relative pressure on the management will be further lessened. This is of course dire because the model already has difficulties with providing proper incentives for efficiency and effectiveness. Incentives for quality improvements and cost-effectiveness will accordingly not spring from the funding model and this seriously hampers and jeopardizes the ability of the model to create prudent and efficient resource utilization. The otherwise benefits of using formula funding, i.e. efficiency, equity, accountability may as a result not be created in this situation, making the model almost similar to a mere reimbursement model, with the associated consequences of such models.

As a result the ability of the payer to induce desired behavior will be limited and may come to depend on the effectiveness by which the control system can measure and compare actual spending and results or for that matter discover unwanted and adverse behavior. Benchmarking and cost analysis are thus essential in order to counter the otherwise lack of incentives for efficiency and quality assurance.

#### **7.4.3. HIGH COMPETITIVE PRESSURE/HIGH BUDGETARY RISK**

The set of combinations in the first quadrant is characterized by a high competitive pressure and a high level of budgetary risk. The competitive pressure means that service providers act on a highly competitive market with competition potentially emanating from both private and public providers. In terms of productivity and high levels of enrollment the competitive situation brought upon the providers, means that they will have a strong incentive to focus on retaining and attracting pupils.

The competitive situation will in other words induce the service providers to seek to commercialize their services in order to make it appealing to potential users. The quality of service will thus be a local focus point. Not only can such improvements make it less likely that pupils are to dis-enroll, but the improved quality can also act as a mean to enhance the market share, making the services attractive to potential users. A low level of quality will when combined with the competitive pressure namely mean that that dis-enrollments will have a direct effect on the budgetary situation of the particular school district. The providers are accordingly given stark demand-side-induced incentives to come up with innovative solutions to the benefits of the users. Similar concerns can however also spring internally from the stark budgetary risk placed on the providers.

The high budgetary risk will make it ever more necessary for the service providers to ensure a prudent and efficient operation as a mean to respond to the expectations set. In relation to this there is however a danger that the magnitude of risk will be so vast that unwanted and adverse behavior can be created. The high level of budgetary risk can here come to affect the type of pupils enrolled. If the relative needs of the pupils are not covered fairly by the model the incentive to deter users or cream-skim if possible will be very stark. The relative magnitude of risk will in this context highly depend on whether the providers are able to respond freely to the competition. If the grounds for fair competition do not exist, due to for example cream skimming from the part of private providers, this will affect heavily the ability of local providers to create prudent and efficient service delivery. The stark budgetary risk may further prompt service providers to seek to shift the cost of users or to deter pupils for whom the associated risk is too stark.

The pronounced competitive pressure may also induce behavior which from a broader perspective is seen as more adverse. Providers can for example feel compelled to spent large amounts on marketing and promotion in order to become more attractive and visible to potential users. Resources which from a more general cost-benefit or welfare economic viewpoint could have been better spent elsewhere. The inclination to participate in such behavior may however to some extent be mediated by the high level of budgetary risk, which can make such spending behavior less desirable. On the other hand the high level of budgetary risk will make the need to uphold high enrollment levels even more present as a mean to lessen the budgetary risk, in turn making it crucial to spend resources for attracting and retaining pupils.

The stark incentives emanating from both the high level of pressure and risk can thus come to threaten the general ability of the model to induce desired behavior. On top of this the created incentives may make many of the common adverse types of behavior more likely. In that, such behavior will not only be a mean for the providers to reduce budgetary risk, but it will also be a way to improve their general competitiveness. As a result the effectiveness of the model can come to depend on the ability of the payer to monitor closely whether unethical behavior occurs and to secure that the needs of all pupils are met.

#### **7.4.4. HIGH COMPETITIVE PRESSURE/LOW BUDGETARY RISK**

The set of combinations in the fourth quadrant is characterized by a low level of budgetary risk combined with a high competitive pressure. The high competitive pressure which characterizes the market will as discussed above incentivize service providers to seek to commercialize their services in order to be able to compete over potential pupils. This means that the content and quality of service delivered will be a present and continuous focus from the part of the management due to the immediate enrollment and budgetary effect of dis-enrolments.

The providers are accordingly given stark demand-side-induced incentives to come up with innovative solutions to the benefits of the users, which is important as similar concerns do not spring from the budgetary risk placed on the providers. The low budgetary risk namely gives few incentives for prudent and efficient operations. The incentive for quality improvement will thus mainly arise from a demand side concern, making it further likely that excessive services will be created in order to uphold enrollment levels.

The high competitive pressure created by the model can as discussed induce service providers to spend large amounts on marketing in order to attract potential pupils. This can be problematic as the low level of budgetary risk will not act as a mediator for cost containment. The main source of uncertainty thus springs from whether the provider is able to attract pupils. The providers are thus subjected to a high degree of predictability in their operations, only affected by their ability to predict the effect of enrollment changes on their budgets. The service providers will as a consequence be given few incentives to ensure efficient management because the budgetary risk may be so limited that it will hamper the ability of such concerns to arise. Further albeit the danger for up-coding may not be so eminent in this situation such behavior could still occur. The same goes for the deterring of particular pupils. Both types of behavior will not only make the budget base even more predictable but will also further lessen the relative pressure on the management.

Overall, this may threaten the ability of the model to ensure efficiency and equity. From a payer's perspective an important focus should thus be that of ensuring that measures are in place which can capture the extent to which funds are used efficiently, that undesired behavior in terms of ensuring the allocative efficiency and equity do not take place and that the expected standards of services are upheld.



## CHAPTER 8. METHODOLOGY

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### 8.1. INTRODUCTION – STUDYING ACCOUNTING AS PRACTICE

An inherent intention of this dissertation is to study management accounting as practice, with the understanding that accounting is not a mere technical, rational service activity, separated from wider social relationship. Studying accounting as practice thus entails much more than analyzing the blueprints of accounting, i.e. the accounting manuals, budget rules, and expenditure authorizations. Rather, it entails studying how accounting practices become practical resources that actors can manipulate in order to signal intentions, motivations and achievements (Ahrens & Chapman 2007:24). The study of accounting practices thus opens up for studying how various actors draw upon the rules, processes, ideals, and targets of management control practices (Ahrens & Chapman 2006a:108) and such a study accordingly first truly unfolds its potential when the focus is directed upon the actions and ways in which organizational members draw on accounting as a shared resource (see Ahrens & Chapman 2007; Barnes 2001; Swidler 1986). With this also comes the need to consider the wider social environment of the accounting phenomenon under study. That is, studying the practices of accounting in the context in which they operate, as firstly advanced by Hopwood (1983) (see also Buchell *et al.* 1985; Hopwood 2008; Khalifa & Quattrone 2008; Baxter & Chua 2009).

Field research involves precisely the study of human practices in their natural settings (for reviews see Keating 1995; Ahrens & Dent 1998; Merchant & Van der Stede 2006), and the qualitative field study, Chua (1986:618) emphasizes, offers especially “*the understanding of accounting in action*”. Through field research, typically conducted in a limited number of settings a “rich” understanding of the relevant phenomena can be provided (Merchant & Otley 2006:790). The qualitative research methodology allows the researcher to go beyond questions of *what* (identification) and *how* (explanation) and into the questions as to *why* certain phenomena exist as they do (Merchant & Otley 2006). Doing qualitative field studies in management accounting is consequently, in the words of Silverman (2006), not a question of *method* but one of *methodology*, understood as the general approach adopted when studying a specific research topic (see also Ahrens & Chapman 2006b:1).

The methodological and theoretical task for the qualitative researcher, hence, becomes that of *expressing* the field as a social object, in contrast to simply *describing* or *clarifying* it to the reader as a part of a given nature. As noted by Lillis (2008:242) the qualitative approach thereby helps extend the general insight into and the understanding of how accounting practices respond to real organizational settings. Further, opening up for opportunities to explore the logic that motivates the evolution and adoption of practices. Through this, capturing the possible organizational tensions stemming from potentially different views and constructions placed upon ac-

counting in the organizational settings under study (Hoque *et al.* 2013:1175; see also Ahrens & Dent 1998). The ontological assumption adopted for this study of accounting as practice is consequently that: “*social reality is emergent, subjectively created, and objectified through human interactions* (Chua 1986:615). Accounting is, in other words, understood as meanings and norms which, through complex interpretive processes and structures, are transformed into an objectified social reality (see Boland & Pondy 1983; Berry *et al.* 1985; Ahrens & Chapman 2007). Albeit, this reality confronts individuals in a manner analogous to the real world, there is no neutral, objective world of facts acting as the final arbitrator (Chua 1986:614).

The qualitative methodology thus comes with an acknowledgement that the field is “*itself not just part of the empirical world, but is shaped by the theoretical interests of the researcher. This means that the definition of the field is profoundly theoretical*” (Chua (1986:618). The field as a social reality is in other words only sensible if defined with reference to theories that illuminate its activities (Hoque *et al.* 2013: 1174). This makes the qualitative research methodology “*inductive, emerging and shaped by the researcher’s experience in collecting and analyzing the data* (Creswell 2007:19). Or as noted by Scapens (2004:264) the researcher cannot be completely independent of the case being studied. The research process therefore can never be a neutral, objective process (Ryan *et al.* 2002:152). Thus, albeit as a researcher I am not directly involved in the issue under study, the act of asking questions and analyzing data is in itself enough to influence the results put forward. With my role as a researcher, in a sense that of a *visitor* visiting the field and interviewing relevant people from the field of study, the research output comes to represent my interpretation of the data. Making it inevitably subjective, affected not only by the participants but also by the approach taken *vis a vis* the collection and analysis of data. In the remainder of the chapter the research design and the two field study municipalities will be presented, followed by a presentation of the data collection process, the type of data used and the subsequent process of coding.

## 8.2. RESEARCH DESIGN & SITE SELECTION

A qualitative field research methodology is adopted for the study of formula funding models and managerial practice in the context of Danish schools. For this purpose two municipalities are chosen as subjects of study. Through this indeed limited number of settings the hope is that the richness of the particular context can be reflected provided through the creation of a thick, holistic and contextualized description. Nevertheless, the study also aims to bring about broader contributions to the general understanding of formula funding models and behavior. The theoretical contributions are thus hopefully achieved through the analysis of the detailed, holistic knowledge created through the analysis of multiple empirical sources rich in context (Telis 1997; Merchant & Otley 2006, Ahrens & Chapman 2006a, 2007).



In order to ensure the *procedural reliability*, that is, making possible comparisons between the two the field studies take on the same form organized in three chapters. The first chapter presents a thorough description of the formula funding model used. This includes a presentation of the local objectives for the school system as well as an analysis of the control components making up the funding model in place. The analysis is guided by the theoretical frame put forward in Chapter 5 of the components making up the overall *package of controls* but is also infused by the actual findings, thereby allowing a deeper, more contextual understanding of the control components in place to emerge. The second chapter is a theoretical analysis where the effect of each control component on the two control characteristics, the level of budgetary risk and the level of competitive pressure, is analyzed. The chapter discusses the incentive structures and with it the type of managerial practice created. Finally, the third chapter presents an account of how school management is actually practiced. The accounts focus on the guiding principles affecting the management in their practice of running the school. This is done without direct reference to theoretical themes. Rather, topics are allowed to emerge from the interviews, thus visualizing how education concerns are weighted against the model's incentive structures. In the concluding part of these chapters the actual managerial practice is compared with the actual fulfillment of the political objectives, thereby opening up for a discussion of whether the practices created are in line with the core objectives.

The two specific settings have been chosen for a set of reasons. The two municipalities were some of the first, following the Structural Reform in 2007, to devolve parts of their special educational funds to the individual school districts. Their ways of doing this are different as well in structure and in speed, albeit certain similarities between the two also exist. Common for both was the desire to counter the increase in cost associated with special needs services. Choosing these two municipalities thus offers the opportunity to study the effects of different design structures and with it the effects on the resulting behavior and practice. Yet, because similarities in the design do exist, comparisons between the two models are, though, possible.

Both municipalities are located in more rural parts of Denmark, making them more exposed to problems like declining birthrates and larger geographical distances between school departments than municipalities with profound urban areas. The specific context may in this way affect the generalizability and transferability of results to other school settings. Yet, it is important to note that the effect of precisely these factors (decreasing pupil numbers and geographical distances) is in fact included in the framework. A clear difference in the socio-demographical conditions however exists between the two, which means that the study allow for an analysis of how and if this factor plays a role when it comes to the actual design of funding models. All in all, the two municipalities thus offer excellent opportunities for the study of practice in the light of the proposed theoretical framework. Adequate hopefully also for the study of funding models and practice in other settings.

The first of the two field studies is conducted in Municipality A, a municipality founded as a result of the Municipal Reform of 2007 through the amalgamation of seven small municipalities. Located in a rural part of Denmark Municipality A is geographically one of Denmark's largest. Albeit, mainly composed of smaller village communities, two relative larger towns make up approximately half of the population of Municipality A. In 2013 the number of inhabitants was 43,528 (Statistic Denmark). The municipality is exposed to some of the 'worst' socio-demographic conditions faced by any of the 98 Danish municipalities, reflected in factors such income, educational level and unemployment as well as problems of debt and crime (Cevea 2014). Combined with a steep declining birthrate the socio- demographic development constitutes a significant challenge for the municipality and the school system in particular. A range of control related challenges are thus created which not only requires a stern governance structure but also an efficient use of funds.

The second subject of study is Municipality B, a municipality also established with the municipal reform in 2007. The amalgamation of two previously independent municipalities here made Municipality B the geographical largest in its region, albeit being only one third of the area of Municipality A. Geographically, Municipality B is made up by medium size towns as well as more rural areas. The number of inhabitant in 2013 amounted to 40,778 (Statistic Denmark), making it comparable in population size with Municipality A. When comparing the 'socio- demographic score' of the Danish municipalities the score of Municipality B ranks among the top twenty (Cevea 2014). The municipality is though also faced with a declining birthrate and not at least with a very high private school enrollment rate. For the school year of 2012/13, 33% of the children in municipality B were enrolled in private schools. A number being more than double the national average of 15% (Statistic Denmark). Due to historical circumstances no special needs schools are placed or run in Municipality B. Thus, in order to abide by the law the municipality has entered into partnership agreements with the surrounding municipalities. Table 7.1 compares key figures on the two school sectors as well as on specific economic and social indicators covering the period from 2011-2013.

	Municipality A			Municipality B		
	2011	2012	2013	2011	2012	2013
Population	45241	44436	43528	40603	40655	40778
Total number of pupils	5034	4838	4700	5546	5463	5468
Pupils enrolled in the public school	3516	3402	3293	3772	3717	3708
- in main stream classes	3 453	3302	3204	3635	3586	3584
- in special needs classes	63	100	89	137	131	124
Private and private independent schools	1260	1202	1177	1531	1516	1529
Special needs schools	101	93	90	83	65	82

Boarding schools for 14-17 year-olds	157	141	140	160	165	149
<b>Pupils receiving special education</b>						
In total	462	272	202	472	265	217
In the public school	306	138	102	297	131	130
- in main stream classes	243	38	13	160	0	6
- in special needs classes	63	100	89	137	131	124
Private and private independent schools	34	23	0	81	57	0
Special needs schools	101	93	90	83	65	82
Boarding schools for 14-17 year-olds	21	18	10	11	12	5
<b>Operating account (1000 DDK)</b>						
3.22.01 Public schools	255,443	248,752	213,343	237,337	247,186	238,167
3.22.02 Joint expenses for the municipal school system	374	0**	0**	1 269	1274	114
3.22.07 Special needs education in regional services	538	541	463	5408	6451	5189
3.22.08 Municipal special needs schools	62,356	54,386	65,523	22 640	20 255	34 983
Net expenses for the public school pr. pupil in the general environment, pre-school-10 <sup>th</sup> grade (index)	72,952 (126)	73,910* (127)	65,063 (113)	65,817 (114)	70,154 (120)	68,458 (119)
Educational cost pr. child in the age of 7-16 (gross) (index)	79,327 (116)	79,274 (114)	75,780 (110)	62,398 (91)	65,562 (94)	65,850 (96)
Educational cost pr. child in the age of 7-16 (net) (index)	74,025 (116)	73,739 (115)	71,388 (112)	58,888 (93)	62,026 (97)	63,517 (99.9)
Educational cost pr. public school pupil (gross) (index)	115,088 (135)	115,849 (136)	108,713 (129)	94,359 (120)	99,268 (116)	99,901 (119)
Educational cost pr. public school pupil (net) (index)	107,396 (137)	107,761 (137)	102,412 (131)	89,501 (114)	93,915 (119)	96,361 (125)
<b>Economic and social indicators</b>						
Spending per capita (2013) (national average = 100)	Over 107			93-100		
Service cost per capita (2013) (total net costs – user-financed costs – net transfer payments) (national average = 100)	Over 107			100-107		
Passive income support per 17-64 (2013)	Over 125			75-100		
Disposable income compared to the national average (2012)	-90			105-115		
The proportion of 25 year-olds who has finished further education (2013)	36-58%			58-61%		
Proportion of public school pupils' who	3.0-3.9 % /			3.0-3.9 % /		

failed their final examination in Math/Danish (2013)	2.0-2.9 %	3.0-3.9 %
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- *Table 7.1 Municipal and school sector characteristics, Municipality A and Municipality B. source: LGDK 2014, ØIM Kommunale nøgletal, Statistic Denmark 2015<sup>9</sup>*

\* Includes also the cost of integrated special needs pupils.

\*\* Due to bookkeeping routines all funds including the joint municipal expenses are entered in at the district level.

As can be seen, Municipality B has a higher population of pupils, not at least because of the steeply declining birthrate in Municipality A. Moreover both are faced with a relative high private school rate. In this context it is important to note that special needs education is almost solely given in the context of the public school system. Although the legislative amendment of 2012 makes comparison across years difficult, the table shows that the type of special needs education delivered in the two municipalities is changing. Now primarily taking place in segregated special needs classes placed in the general environment of the public school or in special needs schools. Special needs education given in the general/mainstream classes is however low, albeit somewhat higher in Municipality A. When it comes to special needs schools the fluctuations in use in Municipality B is interesting, in as much that the corresponding use in Municipality A is decreasing over the course of the period.

As for the municipal expenses the table illustrates how the general municipal spending on schools tends to decrease, simultaneously with the cost of especially special needs schools taking up an ever increasing part of the spending. Municipality A has the largest net spending per pupil in the public school. Yet, compared to the national average which in 2013 amounted to 57,527 DKK per pupil enrolled in public schools, the two municipalities are both well over the average. Finally in terms of net and gross education cost per 7-16 year older living in the municipality, the national amount spent amounted respectively to 68,634 and 63,569 DDK, leaving again Municipality A with a higher spending level. This generally higher spending level for example reflected itself in the cost per pupil enrolled in special needs classes and schools which in 2013 amounted to 244,571 DDK (Quality Report 2012/13 Children & School's Committee, CSC 18.12.13, head 4).

### 8.3. DATA COLLECTION – INTERVIEWS AND DOCUMENTS

Field research, Baxter & Chua (1998:82) note, must resonate with the many voices and sources of data from the field in focus. In order to accommodate this, the two field studies are based on the analysis of multiple empirical sources, rich in context.

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<sup>9</sup> Due to differences in how (year vs. school year) and when Statistic Denmark and the individual municipality adds up e.g. pupil numbers or private school rates ect., disparities may arise between the numbers depicted here and the ones used in the analysis where the data comes from municipal documents.

Including semi-structured interviews and different types of archival documents. The interviews were in each municipality conducted at multiple organizational levels, covering both the administration and the school level. At the administrative level interviews were held with managers and employees from the municipal school and accounting sectors, while interviews at the school level were conducted with the principals of school, department heads and administrative employees. By interviewing people employed at different levels and positions, diverse insights and perspectives on the funding model came to light thus bringing forward a clearer picture of the managerial practice created.

As the main focus of study is the effect of the funding model on managerial practice it was decided that no teachers were to be interviewed. Albeit these of course are those who on at first hand have to carry out and teach in environments directly affected by the managerial practice created they are rarely included in discussions on the deeper details of the funding model. Yet, by including different managerial levels within the school districts, the interviews brought the needed insights into the perceptions, tasks and focus areas associated with the different managerial role. Creating therefore an even deeper insight into the overall managerial practice existing in the particular district.

In total 15 semi-structured interviews were carried out over the course of a month in the autumn of the school year 2012/13. Each interview were taped and lasted around 1.5 to 2 hours. All but two were one-on-one, face-to-face interviews, whereas two were group-interviews carried out with employees at the administrative level in Municipality A. It is in this context important to note that the organizational structure at respectively the administration and school level highly affects the number of possible interviews available. In each municipality, the number of persons available is at the outset somewhat limited, due to the size of the organizational structure. Accordingly, albeit only ten plus seven persons respectively were interviewed, the principal actors at the administration level (school and accounting sector) were covered while approximately half of the management teams in place were interviewed. Providing thereby sufficient material to conduct a thorough analysis.

In Municipality A, ten people were interviewed. At the school level interviews were conducted with management teams from two out of the four school districts. Each time respectively with the principal, the administrative coordinator and a department head. Interviews were hence conducted with fifty percent of school teams available and with the different managerial levels within the school management teams. At the administrative level four persons were interviewed; two managers from the school and two from the accounting sector. In Municipality B seven interviews were conducted, again seeking to cover the principal actors at the different organizational levels. At the administration three persons were interviewed; a sector head, a municipal manager and a financial employee. At the school level two out of the five school management teams available were interviewed. Interviews were here held with the

two principals and respectively a department head/head of after-school care services, thus covering the majority of managerial levels in a particular school district.

Table 7.2 lists the interviews, the job description of the interviewee as well as a letter delegated to the particular interview. The letters (A-O) and the ‘assigned job description’ are used to differentiate between the interviews when quotations enter in the analysis. The interviews are thus depersonalized due to reasons of anonymity, opening up for differences of opinions between local management teams and between the schools and the municipal administration to be verbalized.

	<b>Interview’ delegation</b>	<b>Job title of the participant</b>
<b>Municipality A</b>	A	Administrative coordinator, District 1
	B	Department head, District 1
	C	Principal, District 1
	D	Administrative coordinator, District 2
	E	Department head, District 2
	F	Principal, District 2
	G	Sector head & deputy head (finance) (Group interview)
	H	Sector head & deputy head (education) (Group interview)
<b>Municipality B</b>	I	Department head, District W
	J	Principal, District W
	K	Principal, District Z
	L	After-school head, District Z
	M	Sector head
	N	Municipal manager
	O	Financial employee

- Table 7.2 Interview’ delegation and job description of the interviewed persons

Prior to the two main field studies a smaller pilot study was conducted in a third municipality. The intention of this was to get to know the field. Interviews were here also conducted at both the municipal and school level; albeit on a smaller scale. This gave me the first ‘real-life’ insight into the area of school funding and the management of this in particular. The experience further helped to provide a good understanding of the challenges and issues facing the Danish school system and became in this way a vital tool for developing the interview guide used in the two later field studies. Not only did this first glance into practice offer a good opportunity to try out different questions, but it also allowed me to go back and reconsider the questions in a more critical light, changing them if necessary in order better to captured important and even new aspects.

The interview guide consequently came to consist of a range of semi-structured questions, divided into several themes. The first of these was intended to create

insights into the structures of the school system and with it into the local and overall objectives of the school system. The rest related more profoundly to the specific formula funding model in place and the associated processes of planning, budgeting and evaluation. Questions relating to budgetary and educational responsibilities as well as inclusion and the surrounding challenges were also included in the guide. Yet, the approach taken for the field interviews were heavily inspired by the ‘*analytical interview*’, as advanced by Kreiner & Mouritsen (2006); an approach where the aim is: “*to explore the uncharted complexities of practice* (2006:157)”. The interviews were thus not expected to bring about or provide ‘final answers’. Rather, as Kreiner & Mouritsen (2006:156) note, the analytical interview is intended to give input to an analytical conversation so that the field researcher “*get[s] findings ‘beyond’ common sense, and it [the analytical interview] aims to create new insight rather than confirm what was already known before the interview*” (Kreiner & Mouritsen 2006:160). Finally the guide was handled flexible enough to explore emerging paths during the interview, taking into account also the job position of the person being interviewed.

The specific questions were unknown to the persons being interviewed, albeit they all had received a short description of me, my research agenda as well as the overall theme of the interview (through an email send by me few days before the meeting and/or through information given to them from other municipal employees). Therefore the interviewees did not have time to ‘over-think’ answers before hand, neither being ‘clueless’ on the subject of the interview. The questions at the beginning of each new theme were relative open giving the interviewees the opportunity to come up with their immediate thoughts on or interpretation of the question being asked, which depending on the answer could lead to the important “follow-up question” (Kreiner & Mouritsen 2006:158). In turn making way for a dialogue to emerge. The interview guide did thus not act as a straight-jacket which tightly governed the dialogue. Instead, as suggested by Kreiner & Mouritsen, it functioned more as an “*input to, and a premise for, the knowledge creation and the sense making during the interview – as opposed to treating the guide as a driver for the interaction in, and a template for the outcome of, the interview*” (Kreiner & Mouritsen 2006:58). The interviewees were throughout encouraged to and were in fact themselves very keen to give illustrative examples when answering the questions. They were in general very forthcoming and generous in taking their time to explain difficult issues, revisiting particular ones if needed, and in openly discussing their daily tasks. The interviews thus opened up for discussions on the interviewees’ perception of the advantages and weaknesses associated with the funding model as well as the significance and effect of being accountable also for funds for special needs education and not at least of their understanding of the general pursuit of inclusion. In turn giving me a deeper understanding of the challenges and tasks facing them in their everyday practice.

There are of course some obvious problems/limitations associated with relying on interview data. In particular it can affect the participants’ inclination and willingness

to disclose and discuss potentially critical and contentious issues. In discussing their daily tasks, bringing forth perceptions of advantages and disadvantages and on the political and administrative decision-making (in the process potentially criticizing their employers or colleagues), a reluctance to answer might arise in the fear of losing face or saying something controversial. Such concerns may be difficult or even impossible for the researcher to see through or interpret in the moment; thus possible affecting the type and content of the given answers. Although the promise of anonymity may reduce the impact of such drawbacks such concerns are present. Here it is again important to note that the study does not aim at finding the ‘overall truth’ but rather acknowledges that a field study is a social construction, shaped and influenced both by the persons being interviewed and the person conducting the research.

In order to enlarge the source of material, documents in various forms were therefore also collected, including minutes and reports covering the period 2007-2014. This longitudinal perspective was chosen in order to not only ensure a thorough study of the changes being made, but also of the discussions and challenges facing the school system more broadly. The documents further gave great insights into the decision-making process and its’ intentions, including knowledge of the objectives of the school system, the type of funding chosen and with it the broader ideas behind the type of governing structures being applied. The minutes from the monthly meetings held by the relevant committee responsible for the school system were of particular interest. As well as the content of relevant minutes from the municipal board.

This type of data is public available and can be found at the municipality’s’ web-page. Attached to the minutes are general reports, memorandums and policy papers developed by the administration in order to equip the politicians with relevant knowledge when decisions on the school system are to be made. The collected documents thus includes evaluation reports (e.g. the compulsory Quality Report), the municipality’s Coherent Children’s Policy and other strategy papers and documents relating to the budgetary control process (e.g. annual accounts and budgetary follow-ups) as well as documents on the construction of the formula funding model in place. Lastly, data containing descriptions of the schools’ philosophy, statements of values and concepts of learning etc. from all the municipal schools (not only the ones being interviewed) were collected from the web-page of the individual school.

Since it is often the case that no complete description of the specific formula funding model exist it was necessary to include many types of document. When descriptions do exist they often refer only to specific part of the funding model e.g. the funding of general or that of special needs education (often in connection with upcoming changes). They are in mainly presented in very condensed manners, using words and *not* formulae as will be presented in this study. Further as the funding models are being changed on a somewhat constant rate, parts of the documents become quickly outdated. A thorough and close analysis, covering a range of years, thus showed



itself to be needed in order to fully understand and puzzle together a solid and fair description of the full range of components making up the specific funding model.

#### 8.4. CODING OF DATA

Prior to the analysis the interviews were personally transcribed and stored in the software analysis program QSR NVivo 10. A program used in the subsequent data analysis process. Throughout this process three types of qualitative codes were used, *descriptive*, *topic* and *'analytical' coding* (see Richards 2015). Descriptive codes are as their name suggest descriptive in nature, which compared to the other two make them more like quantitative codes. These were mainly used to describe the individual interviewee, as well as more formal/descriptive information about the municipality or school in question (stored as attributes).

The second type, so-called topic codes, were used to label text pieces according to specific topics (stored as notes), and were therefore mainly used to code text describing specific funding model control components. Together these *nodes* thus encompassed information on the different aspects of the funding model, as well as their relation to each other and were primarily derived from the theoretical understanding of what constitutes the different funding model components. New empirically derived notes describing new control component however also emerged through working with the data.

Finally, the third type of coding, the analytical codes (also stored as notes), refers to coding which arises from interpretation and reflection on meanings. Because, as Richards (2015:111) explains, the researcher in this part of the coding process, has to consider meanings in a broader context creating categories that express *'how ideas'* about the data. Consequently, *'analytical'* codes were used as means to understand and interpret the deeper effects of the formula funding models on managerial practice. All in all, the above mentioned three different types of coding were used representing either a theoretical concept, an analytical or practical driven one or simply what Lewins & Silver (2010:83) term as *"interesting stuff" or 'data I need to think about more'".*

Coding took place throughout the process of analyzing and working with the data, resulting in new codes being generated. In order to ensure that the coding scheme developed remained reliable, that is, applied in the same manner across time, the data was revisited following the initial coding. This was for example done by re-coding a 'clean' version without looking to the prior coding of the document in question, ensuring both that codes were used in the same manner across time as well as new codes (which had emerged during the process) also being used across all documents. As a result data saturation, in the sense, that the coding covered the *breath* of the data was ensured. The coding process further facilitated the extraction of particular illustrative opinions or descriptions to be used as quotations throughout

the study in order to illustrate and create a deeper understanding of the intentions and practice created. The quotes are thus seen as means through which to resonate with the many voices from the field, ensuring that the reader, as Baxter & Chua (1998:82) explain, does not only hear the authorial voice. As all the utilized data is written in Danish, the quotes have been translated to English. Through this translation I have tried to capture the specific character of the language used. I hope the reader will bear with me in my attempts to find a balance between what is actually possible to express in English and the – often inventive and colorful – use of language among Danish school practitioners.

## Part III Municipality A

**Part III** contains the first of the dissertation's two field studies. The subject of study is Municipality A which came about through the amalgamation of seven smaller municipalities. Prior to the amalgamation a consultants' report analyzed the service sectors in the seven original municipalities and with it the potential implications of the upcoming merger. The report showed that very different practices and service levels existed and if these differences were not addressed they would, in combination with decreasing birth rates and projections showing a negative socio-economic development, lead to a decrease in service quality.

In order to counter these challenges the school system has since undergone several changes. Including changes in the structure of the school system in general, and not at least, in terms of how it is funded. Since 2009 the funding model has been continuously adjusted, albeit the core focus on pupils and their needs, as the main base for distribution, has remained. As a consequence of the changes an ever larger part of the budgetary responsibilities has been devolved to the schools, in the hope of strengthening and renewing the amalgamated school system so that it will be able to meet the challenges stemming from a declining birthrate and the socio-economic index (see e.g. Children & School's Committee (CSC) 12.04.07, head 42, 51, 52).

In the words of a municipal manager, the current funding model is intended to enable the local management to *"take action, establish, amalgamate, and do things differently compared to before the changes where they acted within very fixed limits* (I G lin.520). The increased local decision-making scope associated with the larger devolvement of especially special needs funds is generally perceived favorable by the management. However, when combined with the steep decline in pupil numbers, concerns are starting to rise. In the future, an administrative coordinator notes, this highly pupil dependent model can become problematic:

"If pupil numbers were stable, then I think the model is really, really good. If we had 20 pupils per classes and the numbers remained stable, then I would almost call it brilliant. I have tried verbalizing this to the teachers; that in fact there are adequate resources in the system, as long as we generate enough business. I have often heard our staff say – 'we have to save, we need to do this and we need to do that, we can't afford this or that, notebooks or trips to the children – This is nonsense, because there is enough money for the children we have. Our problem is the continued need to adjust, not to cut-back – those two aspects are often mixed up; everyone is shouting 'cut spending' – but cutbacks and adjustments are not the same. We need to adjust but not actually cut spending as such" (administrative coordinator, District 1, Interview (I) A lin.368ff).

*Part III*, is three-parted. In **Chapter 9** the technical components making up Municipality A' formula funding model are analyzed. This includes a description of the political objectives of the school system, and a thorough analysis of the control components making up the formula funding model. The analysis is guided by the theoretical frame put forward in Chapter 5 of the components making up the overall *package of controls*. This theoretical framework thus guides and structures the analysis of the funding model, albeit the content is also influenced by the findings thereby bringing life to the intentions behind the funding model.

Building on this **Chapter 10** analyzes the funding model in the light of the developed framework in Chapter 7. The level of competitive pressure and the level of budgetary risk imposed onto the districts by the funding model is studied and the funding model is placed at its relevant position in the rectangle of Figure 7.4. Hereafter the inherent incentive structures of the model are studied, enabling thereby a discussion of the theoretical practice created by the model.

In the final chapter of Part III, **Chapter 11**, the study again moves away from the theoretical implications analyzing instead actual managerial practice. The chapter accordingly presents an account of how school management is actually practiced in Municipality A. The account focuses on the guiding principles affecting the local management in their daily practices. The account therefore seeks to visualize how education concerns are weighted against the model's inherent incentive structures. In the concluding part of the chapter the managerial practice created is compared against the fulfillment of the organizational objectives, in this way highlighting whether the practice created is in line with these objectives.

## CHAPTER 9. FUNDING MODEL, MUNICIPALITY A

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### 9.1. INTRODUCTION – STRUCTURE OF THE SCHOOL SYSTEM

Following the structural reform in 2007 the new municipal administration of Municipality A, the ‘Children & School Committee’, in co-operation with the municipal board, decided that a new organizational structure for schools was needed (see e.g. the Children & School Committee (CSC) 12.04.07, head 42, 51, 52). This not only included restructuring the geographical placement of the school districts, introducing with it district management, but it also entailed reconsidering how the school system was to be funded:

“Our main concern [a head of sector explains] was to create a solid budgetary foundation for our schools. A decreasing population meant that we needed to consider how to adjust budgets, and we quickly reached the conclusion that we needed a pupil dependent allocation” (I H lin.212ff.).

The new structure meant that the fourteen original public schools and two segregated special needs schools were merged into four new districts (Town Council 13.07.07 head 253). Each district has multiple departments, respectively 2, 3, 4, and 5 departments. The specific department does not necessarily provide schooling for all grade levels (0<sup>th</sup> to 10<sup>th</sup>). In fact, some departments function as a sort of supplier school, in that, they only cater to pupils attending preschool up to 4<sup>th</sup> grade or preschool up to 6<sup>th</sup>. In three districts all senior classes (7<sup>th</sup> to 9<sup>th</sup> grade) are further gathered in one department, which means that the pupils enrolled in the “supplier” departments are gathered here after their in-schooling years (CSC 15.08.06, head 22).

The two special needs schools were relocated and placed as two separate departments under the management of one of the districts. By relocating the special needs schools and placing them as a part of the general public school environment the hope was to make the special needs services a more integrated part of the public school system (Town Council 13.07.07 head 254).

The introduction of district management also necessitated a change in the local management structures. As a mean to accommodate the larger organizational units each district was assigned a principal of school, an administrative coordinator and heads of department for each of the individual units in the district. Through a clear division of responsibilities the hope was to create a strong management team which would be able to focus on education, strategic and budgetary matters of the individual departments and for the district as a whole.

Politically, the service area is governed and administrated directly by the '*Children & School Committee*' which, in co-operation with the *Finance Committee*, is responsible for developing and formulating proposals to the Municipal Board. At the municipal level the structural changes were accompanied by a merger of the previously independent organizational functions, respectively responsible for the general school system and for special needs education and segregated special needs services (I H lin.15ff). A new administrative unit, the '*School Sector*' was in turn created to be responsible for overseeing all matters related to education and schools.

## 9.2. OBJECTIVES OF THE EDUCATION SECTOR

With the aim of making Municipality A' public school system one of the best in the country (CSC, 13.09.07, head 51), preparing the pupils and instilling in them the desire to learn more, the main vision of the school system is as follows:

“Through high quality in day-care facilities and schools, the aim is to break the poverty circle and raise the general education level of the youth, and enhance their attachment to the labor market...with the overall vision of raising the number of pupils who continues with further education”. (Political agreement 2011-2013)

In the words of a department head from District 1, this entails placing the abilities of the individual child at the center of attention:

“Our core service is proficiencies, knowledge, and skills, enhancing the education level of all pupils as much as possible. As we're a socially burdened school we're not in top ten grade wise, and we'll never be. But we need to support the educational and social development of all children ... preparing them with the needed knowledge. *Then* we have a chance to give them a better starting point when they finish school” (I B lin.105ff.).

Politically, three concerns are identified as guiding principles for the delivery of education services in Municipality A: 1) the academic capabilities of the pupils, 2) the competences of the teachers and 3) the delivery of service must be orchestrated in a way where a continuous focus on capacity adjustments are instilled in the local management (CSC 02.05.13, heads 5). Based on this and combined with the five themes (Health & Well-being, Coherence & Continuity, Inclusion, Responsibility and Early & Appropriate Interventions) outlined in the municipality's '*Coherent Children & Youth Policy*' (2012) four specific visions, underpinned by objectives and targets, are developed for the school system (see Table 8.1). These visions, it is argued, are to act as indicators of the successfulness of the management and of the school system as a whole (CSC 06.12.12, head 107).

<p><b>The academic level of the pupils is to be equal to the national level:</b></p> <p>In order to improve the academic levels; so that 95% complete further education, and 70% of pupils receiving special needs services pass the final examination in Danish and Math, the educational and social development of all children, their test scores, grades and reading skills must be a continuous focus through the curriculum.</p> <p><b><u>Performance targets</u></b></p> <p>97% of pupils finishing the final examination are deemed ready for further education.</p> <p>After completing 1<sup>st</sup> grade 70% of the pupils must be capable of reading, 85% after 2<sup>nd</sup> grade and 95% after 3<sup>rd</sup></p> <p>In the in-schooling the reading abilities of bilingual pupils must be equal to those of native speaking pupils.</p> <p>95% of the pupils enrolled in mainstream classes must pass the final examinations in all compulsory subjects.</p> <p>At the age of 7, 95% of all children must be deemed ready for school (equal to the national average).</p> <p>70% of pupils enrolled in special needs classes must pass the finals in Danish and Math.</p> <p>The grade average must be raised above what can be expected relative to the socio-economic index of the schools</p>	<p><b>A focus on inclusion will improve the educational level and well-being of children:</b></p> <p>With the objective of improving learning outcomes, the use of inclusive pedagogies and IT will create learning environments which ensure the attendance of all pupils and encourage active participation. A focus on the social, mental and physical well-being of pupils is a preventive factor of bullying.</p> <p><b><u>Performance targets</u></b></p> <p>The educational services and efforts must be orchestrated so that so that the number of pupils in the general environment increases percentage wise compared to the previous year</p> <p>The number of pupils referred to special needs classes or schools must be lower compared to the previous year.</p> <p>The teaching plans for each subject must describe how the class works with IT.</p> <p>All pupils must receive a minimum of 30 min. exercise each day.</p> <p>At least 80% of all pupils must indicate that they are 'satisfied', or 'more than satisfied' with the school when answering satisfaction surveys.</p> <p>School absence per pupil must be less than 10 days per year (6 sick days, 2 days of extraordinary absence and 2 days of 'illegal absence')</p>
<p><b>The qualifications of the teachers are high:</b></p> <p>The teachers' qualifications and skills must be ensured, and the management must ensure a cost-effective management of the school.</p> <p><b><u>Performance targets</u></b></p> <p>100% of the staff must have or be in the process of acquiring a qualifying degree.</p> <p>90% of all lessons must be taught by a teacher with subject specific competences or with competences equivalent to that.</p> <p>95% of all lessons must be taught by the permanent teaching staff.</p> <p>In average 36% of teachers' gross working hours must be made up by actual teaching.</p>	<p><b>A well-functioning collaboration between the school and home will result in high parental satisfaction:</b></p> <p>Active parental participation and fast, dynamic communication through the 'parental intranet' creates a high quality school, ensuring that the public school is the natural choice of the parents.</p> <p><b><u>Performance targets</u></b></p> <p>90% of the parents must on a recurring basis use the 'parental intranet'</p> <p>70% of parents participating in satisfaction surveys must be 'satisfied' or 'very satisfied', with a response rate of at least 55%.</p> <p>The school board must develop principles for the focus areas depicted in the 'Coherent Children and Youth Policy'.</p>

- Table 9.1 Visions, objectives and targets for Municipality A' school system 2012/13

The performance targets are, as seen, to a large extent measures of outcome; that is, measures which seek to capture the learning outcome of the pupils, the level of inclusiveness and parental and pupil satisfaction. Examination and test results are used to capture learning outcomes, while the number of pupils taught in the general/mainstream public school environment is seen as a measure of the inclusiveness of the schools. Parental and pupil satisfactions scores are included as points of measure for evaluating the well-being of pupils and the satisfaction level of parents. More input-related measures are however also included. The indicator for ‘quality teaching’ is for example the educational level of the teachers.

Broadly, none of these measures specify or make mandatory the precise activities or processes which much be implemented in order to fulfill and improve the quality of the education offered. Although the quality report has included a list of specific indicators/activities for each performance targets none of these are binding. Rather, they are intended to act as inspiration for the organization and planning of local activities. The management can thus choose freely the activities they deem appropriate, as long as this of course is done within the law.

The above objectives also include more managerial related concerns, with budgetary viability pinpointed as a vital indicator which must guide the delivery of local services. Accordingly, from a political/administrational point of view the management must not only focus on education-related matters, but also ensure cost-effective management, which takes into account decreasing pupil numbers. This, it is stressed, entails ensuring a high percentage of actual teaching and limiting the use of non-permanent teaching staff. Upholding high class averages is further encouraged as a way to ensure a cost-effective delivery of service and a stated aim is here that the average across districts reaches 21 pupils per class (CSC 28.12.13 head 4). From a political/administrative point of view, the local management is thus accountable for not only the education-related results but also for the budgetary developments of the district. This duality is also ingrained in the school management. In fact, the principal from District 2 explains, these perspectives are closely intertwined, in that, financial viability is a precondition for attaining the other objectives:

“It’s not like we’re only thinking; school and budgets. We’re certainly also thinking about development and teaching, and a firm steering of our financial situation will enable us to improve our education. We have the ‘worst’ social index in the country; this influences the children we have to teach. We focus on inclusion – inclusion and our financial circumstances – these are the two main areas where we have to succeed” (I F:53ff.).

### 9.3. FORMULA DESIGN, MUNICIPALITY A

From the *School Sector* funds are devolved to the districts via a mix of payment methods. The spending frame is made up by two appropriations, one for general



education and one for special needs education. The formula used to allocate the total spending frame is intended to cover the cost of general education, additional educational support as well as special needs education supplied in the general environment, in specific special needs classes or in one of the two special needs schools.

Prior to the allocation a part of the budget is set aside for a range of specific purposes. Among other things this includes funds for bus transportation and for specific severe special needs services, e.g. second special needs school but also for special needs services given to pupils in residential institutions and special needs education given to newcomers to the municipality. On top of this, funds are also set aside with the intension of compensating schools for long-term illnesses among staff, for teachers over the age of 60 and for additional training activities. These latter funds are distributed late in the budget year, independently of the general allocation.

The spending allocation frame for the school year 2012/13 for a specific school district is set February 1<sup>st</sup>, based on respectively the number of pupils enrolled in pre-school to the 9<sup>th</sup> grade, and the number of pupils February 1<sup>st</sup> who are to begin in preschool<sup>10</sup>. The first part of the formula may be represented as:

$$\sum_{i=1}^3 A_i p^i,$$

where the levels  $i = 1, 2, 3$  correspond to the age categories: in-schooling (preschool - 3<sup>rd</sup> grade), middle-school forms (4<sup>th</sup> - 6<sup>th</sup> grade) and senior classes (7<sup>th</sup> - 10<sup>th</sup> grade).

The second part, concerning the special needs education can be written as:

$$\sum_{j=1}^6 d_j p_j + C.$$

Here the  $p_j$ 's represent the fixed rate per pupil enrolled in the six segregated "special needs classes/schools" (CSC 16.08.12, head 62; 07.02.13, head 5) providing special needs education in Municipality A.  $d_j$  is the number of pupils in the district referred in agreement with the municipality referring committee to service number  $j$ . The part C, which is supposed to cover locally arranged and supplied inclusive seeking initiatives and special needs education, is a fixed allotment intended to cover the entire school year. It be written as a sum  $C_1 + C_2 + C_3 + C_4$  (CSC 03.05.12, head, 30, 16.08.12, head 62), where

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<sup>10</sup> Note that the enrollments February 1<sup>st</sup> are adjusted taking into account 50% of the average recorded decrease in pupil number over the last two years in the period February 1<sup>st</sup> - October 5<sup>th</sup>. For the pupils expected to start in pre-school, this number is adjusted in accordance with the average private school intake of the two previous years (CSC 12.01.11, head 3)

$C_1$  is a pool of funds for integrated, inclusive seeking services and initiatives ('Inclusion-funds') and is based on the number of pupils December 2011 (CSC 16.08.12, head 62). This procedure is argued by the municipal sector by saying that they have closely monitored the field over the last couple of years and feels this to be a fair representation of needs).

$C_2$  a fixed allotment for special needs classes in the middle and in-schooling age categories. Observe that this number is common for all school districts.

$C_3$  an allotment based on the actual local referrals to specific special needs classes for the school year 2012/13; intended to enable districts to acquire externally provided services when needed.

and

$C_4$  a pool of funds for individually local orchestrated arrangements, for pupils referred by the administration.

All in all the forecast of the spending allocation frame for a district as set February 1<sup>st</sup> 2012 may be represented as follows

$$\text{Spending allocation frame} = \sum_{i=1}^3 A_i p^i + C + \sum_{j=1}^6 d_j p_j.$$

### 9.3.1. COMMENTS, THE PAYMENT PER PUPIL

The pupil dependent part of the above formula,  $\sum_{i=1}^3 A_i p^i$ , is intended to cover the cost of general education, as well as the associated operating expenses and is thus understood as a measure of the average costs of teaching a pupil in the general education environment. The payment per pupil of age-category  $i$ , termed  $p^i$ , is determined by taking into account:

- *The recommended number of lessons for the specific year group August 1<sup>st</sup> 2008<sup>11</sup>.*
- *An average class-size of 20 pupils.*
- *An average number of teaching lessons (23 lessons per teacher per week, amounting to 680 clock hours per year).*
- *An average measure of a teacher's salary.*

$p^i$  is, in other words, adjusted according to age and is further raised due to so called 'additional time/resource considerations'. The 'additional time funds' are to cover school camps, pedagogical/'resource centers', extra division of pupil and other ar-

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<sup>11</sup> The in-schooling is allocated additional lessons than the ministerial recommended number, resulting in 27 lessons for in-schooling, 27 for middle-school forms and 31 for senior classes.

rangements determined by the collective agreement, such as employee representatives. Whereas, the ‘additional resource funds’, are to cover administration and management, school boards, IT, substitutes and educational training and courses. A special allotment is further allocated to each 9<sup>th</sup> grades to cover the extra cost of conducting examinations. Lastly, a fixed allotment, based on historical costs is added which is to cover building maintenance, janitors, cleaning, and other expenses for up-keep of buildings (CSC 10.01.08, head 4; 12.01.11, head 3).

All together, these different aspects make up the payment  $p^i$ , which for all levels approximately amounts to DKK 50.000 per pupil enrolled.

### 9.3.2. COMMENTS, THE DEVOLVEMENT OF SPECIAL EDUCATIONAL COSTS

The devolvement of special needs education funds is quite vast, in that, only a few specific services for pupils with severe special needs are excluded from the allocation. In terms of the devolved funds, the two special needs components of the formula take into account the severity of needs, and whether the pupil is referred to the special needs services locally or by the municipal referring committee. The School Sector has decided that 75 % of all referrals must be orchestrated at the school level in co-operation between the management and the PPR-team (pedagogical and psychological counseling). The rest is to be conducted by the municipal *Referring Committee* although the budgetary responsibility is subsequently devolved.

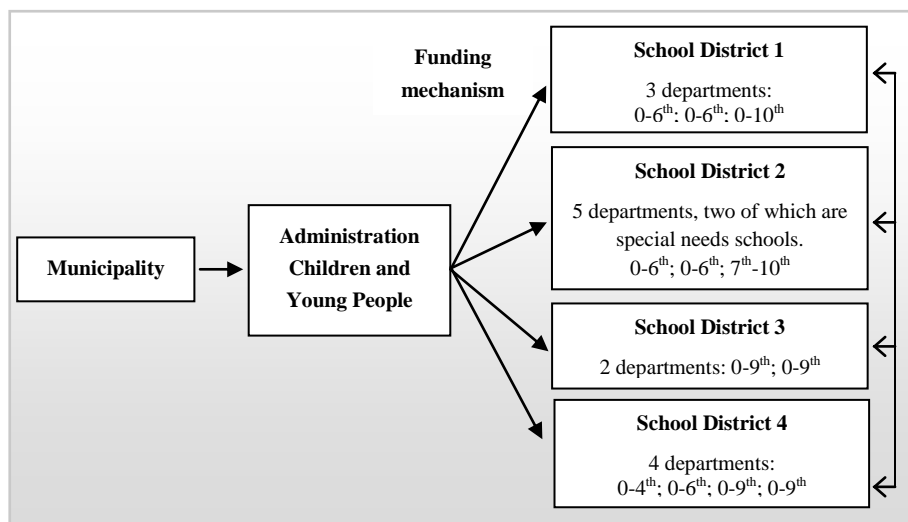
For the school year 2012/13 the allocation was based on an analysis and count of actual needs/referrals. 380 were found to be in need of special needs education, with respectively 293 referred by the schools and 87 by the committee. Accordingly: “*in order to accommodate the intensions of the new law [Act no. 379, 28.04.2012 concerning special needs education and other special educational assistance] funds are devolved for:*

- 1) *Supplementary teaching, extra support, and group formations [C<sub>1</sub>]*
- 2) *Group and individual-integrated special needs education [C<sub>1</sub>]*
- 3) *Special needs classes in in-schooling and in the middle-school classes, [C<sub>2</sub>]*
- 4) *The purchase of services in special needs classes at other municipal schools [C<sub>3</sub>] (CSC 16.08.12, head 62)*

Through the devolvement schools are expected to be able to establish inclusive services for integrated groups, plus specially orchestrated teaching conducted through the schools ‘resource center’. Each district is further expected to be able to establish a special needs class in the in-schooling respectively the middle-school forms and when needed to purchase special needs services at other municipal schools.

The second special needs component refers to centrally referred pupils in special needs classes mainly at special schools. These funds are also at the outset devolved and found by attaching an amount/internally set rate for having a pupil enrolled in the specific special needs class or class (07.02.13, head 5). If the pupil is not referred to services in the district, funds are immediately transferred to the district in which the child receives its education (CSC 03.05.12, head 30; 16.08.12, head 62).

For the school year 2012/13 the flow of funds can be illustrated as in Figure 9.1.



- Figure 9.1 Flow of funds and structure of Municipality A, school year 2012/13

### 9.3.3. COMMENTS, MODEL PRECISION

The model is constructed so that it is intended to accommodate both horizontal and vertical equity concerns. Vertical equity is addressed in terms of pupils with severe special needs. This is done by varying the payment, attached to a pupil, depending on the specific needs and the services in which it is enrolled. Horizontal equity is pursued by funding all districts through the same set of rules, based on an average cost perspective. In Municipality A this is manifested by compensating districts with the same payment  $p^i$  per pupil enrolled, and secondly by allotting all districts the same amount, intended for inclusive-seeking services.

The underlying precondition and assumption associated with funding according to a concern for horizontal equity, is that all districts are equal along dimensions, such as wealth and socioeconomic status. In principle, the funds should accordingly enable all schools to deliver the same level of service in terms of the general education while taking into account differences in pupil needs. The precision by which the model captures the actual needs and characteristics of the pupils thus becomes important.

A general concern, as expressed by a deputy manager from the administration, is however that the needs of the “ordinary” pupils are in fact not the same but that they vary across districts. In fact, it is argued, the socio-demographic profiles of the districts are not the same. This means that the precision by which the model reimburses needs is not accurate and some districts may as a result not be compensated fairly for the actual needs of their pupils:

“There is a bias, that is, we have typically seen it when it comes to the group- and individual integrated [pupils], there are differences between what you get in the east compared to the west, so you can see where the problems are” (I G lin.569).

Consequently, the deputy head notes, some districts may have been given preferential treatment, i.e. been overcompensated, leaving the rest undercompensated. Prior to the increased devolvement of special needs funds, this may have induced some to over-refer pupils to special needs education, both as a mean to compensate for the inaccurate allocation but also as a way of accumulating a larger budget base.

#### 9.4. SCALE OF BUDGETARY DEVOLVEMENT

The above spending frame formula represents the general rule for the allocation of funds in Municipality A. The appropriation level is as seen quite high, in that, the budget authority to a large degree has been devolved to the *School Sector*, and from here further to the individual district. The devolvement of special needs education funds is also quite vast, in that, only a few specific services for severe special needs are excluded from the allocation. Additional cost sharing arrangements however modify the general setup by transferring some of the financial responsibility from the districts to the municipal *School Sector*. Table 9.1 explains the exact distribution of responsibilities among the schools and the administration.

Administration Children & Young people – School Sector	
	Transportation for pupils to and from the home-district department
	Funding for a small department
	Special needs education for newcomers to the municipality
	The additional costs above the threshold price paid by the district school for pupils enrolled in special needs classes
	Special needs school for pupils with very severe needs
	The educational cost for pupils living in residential institutions and homes
	Outdoor up keepings, renovation and larger expansions ( <i>joint municipal team</i> )

Devolved to the school districts	
	Funds for ordinary teaching and general operating expenses
	Supplementary teaching, extra support and group formations
	Group- and individual integrated special needs education
	Special needs classes in in-schooling and in the middle-school classes
	The purchase of special needs services at other municipal schools

- *Table 9.1 Division and devolvement of financial responsibilities*

The administration holds the budgetary responsibility for outdoor up keepings. This is transferred to a central municipal team which is responsible for larger rebuilding's and renovations of the municipality's buildings (Municipal Board 28.06.07, head 205). The budgetary responsibility for bus transportation for pupils to and from home, is also retained at the municipal level. Transportation cost is here covered for pupil enrolled in a home-district department and for children who due to assessments of needs are enrolled in special needs service in other districts. If however the child is enrolled in a department in another district or in a private school the costs of transportation is not covered.

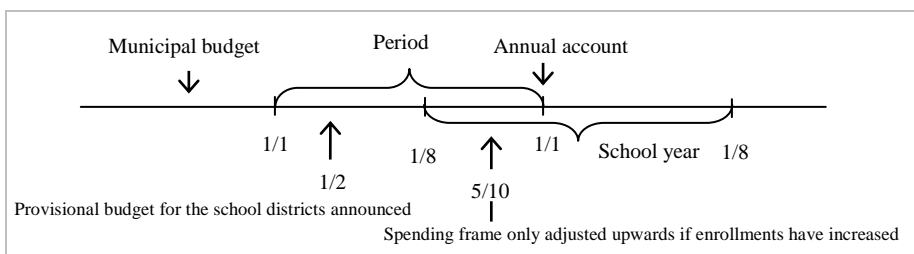
The administration further bears the cost of pupils coming from outside of the municipality if their needs are so severe that these cannot be met within the services provided by the school district. The administration thus defrays the full costs of services given to such pupils until the next allocation takes place (CSC 12.01.11, head 4). Depending on when the child is enrolled considerable time can thus pass before the budgetary responsibility is taken over by the school. A similar carve out arrangement is implemented for the smallest school department. Because, it is argued, its geographic location hampers its ability to generate activity so to be financial viable. If the required academic level is to be met this, it is argued, will affect severely the budgetary situation of the district as a whole. Because local services are a political focus point a fixed allotment is thus allocated each month, under the strict condition that these funds are to be used exclusively here (CSC 07.06.12, head 49).

Stop-loss arrangements for pupils with severe special needs are also established. The districts, as explained, receive a payment corresponding to an internally fixed rate for pupils enrolled in one of the six segregated special needs classes/schools (CSC 16.08.12, head 62). The cost of these services is however higher than the price paid by the districts, because the administration has decided, in order to soften the budgetary effects of enrolling a pupil with very severe needs, to defray the remaining cost (CSC 16.08.12, head 62). A district is, for example, only to cover 186,000 of the respectively 203,000/222,000 DDK bill associated with a pupil being referred to one of the classes for less severe special needs education, while they must cover 235,000 of the 345,000 DDK for having a pupil enrolled in one of the institutions for more severe services (07.02.13, head 5).

Finally, a carve-out arrangement further means that one of the two special needs schools is funded completely outside the general allocation. This school is specialized in teaching pupils with very severe physical, emotional and social disabilities. These pupils are often enrolled directly from special daycare services and as a consequence they are not included in the number of special needs pupils in a district. With this arrangement the special needs school has its own budget, and although the department in organizational terms is seen as a part of the larger school district in which it is located it must be run as a separate unit (CSC 07.02.13, head 5).

## 9.5. BUDGETARY RELATED CONTROL COMPONENTS

Figure 9.2 visualizes the budgeting process and illustrates the important entries. As discussed, funds are appropriated in the expectation that they cover the spending needs of a school district the following school year (August to July). The annual budget of a district however follows the rest of the municipality with the budget cycle running from January to December.



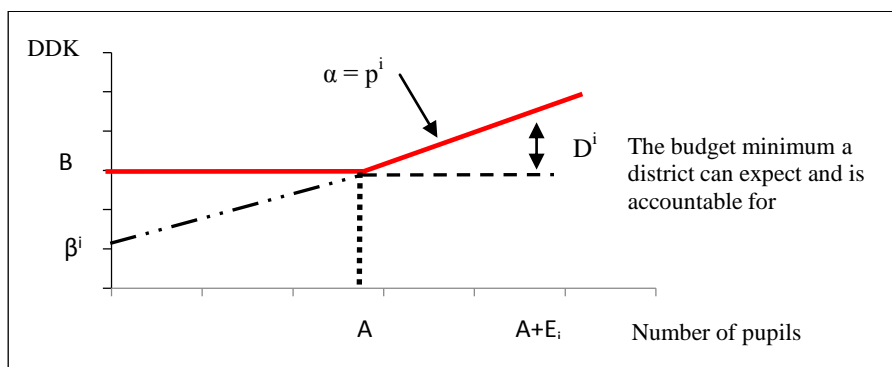
- Figure 9.2 Time dimensions in the budgeting process

To determine the spending frame February 1<sup>st</sup> a range of forecasts of the expected number of pupils to be enrolled in the districts the following school year is made in December. These forecasts are made in co-operation between the *School Sector* and the local management and take into account prior patterns of enrollments. The aim of the forecasts is to estimate 1) the number of pupils to be enrolled August 1<sup>st</sup> and 2) their associated needs. February 1<sup>st</sup> the estimations are made final and the spending frame of each district is announced. The allocation is thus in principle enrollment based, making it resemble a case payment approach, which usually imply that the payer holds the financial risk of an increase in output, i.e. numbers of pupils, leaving providers exposed to the effects of decreasing pupil numbers.

Municipality A however amended this so that the administration holds all risk rising from variations in activities. The spending frame set February 1<sup>st</sup> is namely only adjusted upward if enrollment number has increased by October 5<sup>th</sup> (CSC 12.02.11, head 3). A lower level of enrollments is not accompanied by a corresponding demand to return funds. Thus, if a pupil of age category  $i$  enrolls before October 5<sup>th</sup> the district is compensated with payment,  $p^i$ , whereas if a pupil leaves nothing happens.

As for the funds intended to cover special needs education and supplementary support these are, as described, allocated as a block grant. The allocation thus remains fixed regardless of changes in pupil's needs, thereby resembling a capitation payment approach. Only, if the pupil is a newcomer to the municipality and has so severe needs that these cannot be met within the school's services, the accompanying extra costs are covered by the administration.

This makes the spending frame announced February 1<sup>st</sup> a minimum allocation, which is only adjusted upwards. In order to minimize potential extra costs, the administration is allowed to set the expected numbers of pupils lower than otherwise indicated when the spending frame is determined February 1<sup>st</sup> (I G lin.71, sector manager). The enrollments February 1<sup>st</sup> are, as explained, adjusted taking into account 50% of average decrease in pupil numbers over the last two years from February 1<sup>st</sup> - 5<sup>th</sup> October, while the expected numbers of preschoolers is adjusted in accordance with the average private school intake over the last two years (CSC 12.01.11, head 3). The dependence of the spending frame on enrollment-numbers can thus be illustrated by a broken line as shown in Diagram 9.1 showing the budget curve of a district.



- Diagram 9.1 Effects of pupil numbers on the spending frame of a district

The x-coordinate in the point (A,B) represents the estimated number of pupils February 1<sup>st</sup> and the second the corresponding budgetary frame as determined through the given formula.  $D^i$  represents the additional funds due to  $E_i$  new enrolled pupils in category  $i$ . The slope of the non-horizontal line is  $p^i$ , the pupil dependent rate in category  $i$ , while the height  $\beta^i$  is closely related to the total payment for special needs education determined February 1<sup>st</sup>. If the  $p^i$ 's are independent of  $i$  then these two numbers agree. But as the  $p^i$ 's generally vary with  $i$  a diagram should be made for each of the three  $i$ -levels. They would however be similar of shape. As already remarked special needs for newcomers from outside the municipality is paid by the administration, making the extra funds possibly even bigger.

The construction accordingly means that the minimum budget for a district is determined already February 1<sup>st</sup>. This gives a great level of security and stability for the



school management, leaving the budgetary risk associated with activity changes with the administration. According to a deputy head, one of the intentions behind the model was to accommodate the wishes of the school management: *“we wanted to attend to their desire for predictability in their budgets...before the special needs budget was adjusted each month, and this created problems, because when you hire staff you can’t just get rid of them immediately when children leave”* (I H lin.257ff). The stability introduced is greatly appreciated by the management. As explained by the administrative coordinator of District 2, it makes planning easier and gives the needed time to adjust to dropping pupil’ numbers: *“In other words, we know our budget; We can say, do we need to fire a teacher or hire new ones by August 1<sup>st</sup>? This is the greatest advantage introduced, and it means that there are no surprises in our financial year”* (I D lin.144ff).

Potentially however, the design implies that the municipality may be paying for specific pupils twice. If for example a pupil enrolls in a private school after the budget has been set in February he/she affects the reimbursement the administration is obliged to render to the private provider when these report their enrollments in September. The same apply if a pupil moves to another public school district. Because, as the former school is not required to return funds, the funding model design implies that both the new and the old provider will receive funds for this pupil.

The principle of gross appropriations at the outset means that the budget holder is allowed only to incur obligations or make payments which have been appropriated in the budget. Steps have however been implemented with the purpose of securing a predictable level of services over the course of a school year. Since the annual budget of a school district, as illustrated in Figure 9.2, encompasses two school years each district is allowed to carry forward unspent appropriations across budget years. This is done in order to reduce the possible restricting effects of the annual budget cycle. Each district is allowed to carry forward a surplus of 10% of its original budget and a deficit of 5%. In the case of a surplus exceeding DDK 2 million such a transfer, however, requires a political assessment and a supplementary appropriation from the *Children & School Committee* (Municipal Board 28.06.07, head 205).

The otherwise stability and security introduced is, it is argued, slightly distorted by the use of the additional central funds distributed late in the budget year. Although the administration has tried to confine the use of such pools, historically representing a quite substantial part of the funds allocated, these late allocations, the administrative coordinator of District 1 notes, still complicates planning and the management in general:

*“These funds are always distributed in the latter part of the year, and they ‘save what is otherwise less secure’. But it’s an unhealthy way to manage because it gives rise to much edginess in the time up to. Because we’re never 100% sure how much money is in play. This depends on the num-*

ber of staff who has been sick, how many has been attending training courses and so on. The last two years though more funds have been included in the main allocation, which means we have them during the school and budget year. This gives us a clearer picture of whether each month's spending is actually the percentage it needs to be"(I A lin.318ff )

Similar concerns are raised by the principal from District 2, who explains how the uncertainties affect his abilities to utilize the resources efficiently:

Getting these extra funds can be a good thing. But getting them in the last month of the year, not knowing how much we'll actually get, is not a good foundation for managing – Getting 3-4-500.000 from the pools for long-term illness and it's like in the last part of the year. It's not always so that our budget enables us to spend them prudently – We might have used substitutes and other things during the year, which mean that we have accumulated some sort of overspending. My philosophy is however to manage in a way, so that, we secure a continuous balance of our budgets (I F lin.125ff.).

## 9.6. SCOPE OF MANAGERIAL DISCRETION AND AUTONOMY

The division of budgetary authority means that the authority for internal decisions concerning the operation of the school district, in terms of both general and special needs education and support, to a large extent has been devolved to the districts. The governance model of Municipality A ascribes decentralization as its guiding principle for effective and efficient public service delivery, stressing that decentralization is all-important for meeting the challenges faced by the municipality:

"The best decisions are made when decision-making authority and service delivery is connected. It's only through the creation of strong decentralized management, which operates within the frame of the political set objectives, that it will be possible to create the effectiveness needed within the narrow financial frame under which the municipality is subjected to in the forthcoming years" (Municipal Board 28.06.07, head 205).

Building on the idea that the local management possesses a deeper understanding of pupil' needs and wishes, the high appropriation level and subsequent devolvement of funds is understood to be a mean through which more sufficient and flexible services are to be created. In order to create efficient local management, larger and more viable organizational units were however seen as a precondition.

District management was here understood to be a cornerstone. From an administrative point of view, district management brought along larger organizational entities which further opened up for a devolvement of larger parts of the budgetary respon-

sibilities. District management, in this way, not only enhanced the budgetary base of each district, thereby better equipping them to handle decreasing pupil numbers, but it was also, it was argued, intended to bring about opportunities for economics of scale to be created (I H lin.212ff.sector manager).

The local decision-making scope is further widened through the decision to allow service providers to carry out line-item discretion. Thus, as explained by a sector head, although the preliminary appropriation, as set in the budget, indicates a possible distribution between line items, it is the responsibility of the management to decide how funds are actually spent: *“In principle we give them a bag of money, although we assign the funds, once they have them they can decide [how to spend it]”* (I G.lin554). Line-item discretion is, from the perspective of the *School Sector*, a necessity for ensuring an efficient use of funds and as long as the educational requirements are met, funds can be spent on a different pattern than what was prescribed in the preliminary budget. In turn, the local management is expected to become innovative in their service delivery, especially as any efficiency gains can be kept at a district level (at least up to 10% of the original budget). The enhanced scope for decisions brought about via line-item discretion, the administrative coordinator of District 1 stresses, requires a range of decisions to be taken into account:

“Our allocation model isn’t a precise model. Various sums of money are added up and given to us...but the management is responsible for making it work, which means I’m not held accountable for spending 50,000 on something else than what was prescribed by the model...we view it more holistic and are accountable for the primary goal: teaching. But we also have to ensure that the buildings look pretty good, are cleaned and so on...so everything must work together” (I A lin.407ff).

Funds are accordingly devolved as a lump sum, making it the responsibility of the management to ensure that the needs of the pupils are met. The management can if they see fit allocate more funds to the mainstream education environment or vice versa to the special needs services. This was further emphasized by the 2012’ legislative amendment, which removed the need for official diagnosis and referrals for pupils in need of support less than 12 lessons pr. week. Instead it is now the responsibility of the local management to decide how and in what context, subjects or situations support is to be given (still upholding the requirement that the needs of the pupils must be met). In combination with the decision to place the responsibility for orchestrating and referring the majority of special needs education at a local level, the local room for maneuvering has increased immensely, and the management has been sought involved and made an accountable part of the process.

The local decision-making scope is further enhanced through the decision to allow districts to establish the special needs class in both the in-schooling and middle-school forms. The devolved budgetary authority further means that the management can acquire external special needs services, thus leaving the management responsi-

ble for deciding whether a child can be sufficiently included in the local services or whether support at other schools must be acquired. The vast budgetary devolvement of funds has thus enhanced local flexibility which is valuable, the administrative coordinator of District 1 notes:

“I want some scope for action; I want to be able to move resources around, move staff around, also during the school year. I want to be able to take action whenever needed and be able to move resources again later. In other words, I want flexibility, a flexibility which is given to me through the devolvement of funds, which means I’m in control ... we can act and act fast to the benefits of the pupils” (I A lin.476ff).

Being the budgetary responsible part, the administrative coordinator from District 2 emphasizes, has many advantages, although it does not give *carte blanche*. Some decisions are still retained centrally and the management must still work within the frames and boundaries set by the politicians and the administration:

“It’s a good incentive for us to work constructively, because we’re given full scope over how we spent our money...it’s a good way to cut our budget, but also to challenge us to think differently, because then they aren’t, of course if we start to fiddle with something politically decided. Otherwise we have free control over the funds. It’s a challenge but a good one” (I D: 43ff.).

Albeit, the schools can develop their own strategic priorities the general policy autonomy in terms of abiding by the political determined objective is quite low. Not only is each district expected to fulfill the general objectives of the school system but they must also meet the local academic standards expected. Here, more long-term political decisions on school structure and service levels affect the local decision-making scope. The political objective of preserving local school services is an example of this and entails that all departments must offer all grade level from pre-school to 3<sup>rd</sup> grade (09.06.11 head 52). The management can accordingly not chose to close a grade level in the in-schooling, even not if they feel that funds could be better utilized if the children were enrolled in another of the district’s departments. Accordingly, albeit class optimization is verbalized as an optimal solution for efficient resource utilization (CSC 06.12.07 head 127) the objective of local school services carries more weight.

Local discretion is further affected by the fact that the schools are a part of a larger municipal system. Accordingly, a sector head notes, in order to ensure that the “*complex puzzle across schools falls into place*” (I G lin.34) the individual management team can be forced to take into considerations factors stemming from a broader municipal perspective. This is especially prevalent in relation to staffing. The general policy is here that if one district has a surplus of teachers they should if possible be hired elsewhere. The individual principal may thus not have completely free

range over which teachers are to be hired. These external decisions limit the local scope for discretion and make District 1's principal question the ascribed quest for decentralization:

“At festive occasions we say we have decentralized institutions which are the pillars of our municipal system...I still however can't manage freely. I can't for example decide where I buy office supplies; here the administration has signed a purchasing agreement. If I want to invest in IT I can't decide myself – there is also a purchasing agreement and I must go through the IT department. And I'm of course subjected to general fluctuations in the financial situation of the municipality. If the municipality suddenly is 100 million short, then I'll have to cut back and adjust like everyone else. So I think this is a sign of my financial autonomy being more and more restricted, because the cross sectors are take over more and more” (I C lin.242ff.)

## 9.7. OPEN-ENROLMENT CLAUSE & PRIVATE SCHOOL RATE

The fact that there are only four public school districts means that each of these covers a considerable geographic area. Yet, the district lines are drawn so that the distance between school departments varies both within and across districts. District 1 and 3 divide among them one of the two larger towns, while the other is covered solely by District 2. District 4 lastly covers two relative bigger towns. Furthermore all districts contain vast rural areas.

The private school rate is relative high with 24.9 % of the pupils enrolled in private schools (05.12.13 head 4<sup>12</sup>). Six private schools are present in the municipality in addition to five boarding schools for 14-17-year-olds. Three of the six private schools are located in the two larger towns (respectively two in District 1 and one in District 2), while the rest are sited in the rural part of District 3; a district which also holds three of the five boarding schools. Common for all the private schools is that they are located quite close to a public school department. Four out of the six private schools are one-entry schools offering schooling to all grade levels, while one of the last two is an 'ordinary' private school with more classes on each grade level and the last a school offering only schooling for older pupils with special needs. The private schools are all religiously-founded albeit the specific emphases vary.

The municipality's open-enrollment clause means that competition may also spring from public providers, as the clause opens up for pupils choosing other departments

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<sup>12</sup> In reporting the private school rate it seems that the municipality does not include pupils in boarding schools, if so, the rate is actual closer to 28% (see methodology chapter)

than the home-district department. The free choice is however limited, in that, a child can only enroll in a non-home-district department if the specific class does not already have more than 24 pupils enrolled. The enrollment numbers of 2012/13 show that the average class sizes was 20.9 pupils' pr. class (28.12.13 head 4).

	Ps	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>
District 1	17.4	18.4	20.0	18.4	18.8	18.6	18.2	20.8	17.0	18.4
District 2	18.7	15.8	20.0	23.3	22.7	25.0	23.3	21.7	22.7	19.7
District 3	18.3	22.3	20.3	19.3	22.0	19.8	23.0	20.5	25	24
District 4	24.8	18.0	20.2	21.5	18.6	22.5	22.0	24.4	21.8	20.5

- Table 9.2 Average class size across the four school districts, school year 2012/13

Since the class sizes are registered on a district level, variations across departments are not visible. Actual department enrollments show that class sizes in general are closer to, if not above, the upper limit of 24 in the town departments. The restricting effect of the clause will thus be stronger here – possibly limiting the ability of the local management to improve further their enrollment levels. The close geographical proximity of districts in the town environments however makes competition from public and private providers more likely here. The principal of District 1 notes:

“We’re actually in competition with both private and other municipal schools, and we really feel it here...the structural changes, both in the municipality and in the school system more generally, have meant that many parents have lost insight into what is actually going on in the schools. They have gotten scared and are choosing private solutions...in many ways it can be a good thing – giving parents another choice, a second opinion if things aren’t working – What is not good is that, they are now also allowed to choose other public schools. In this way we are kind of being played off against one another – who have the most colorful booklets – who arrange the coolest parties?” (I C lin.547ff)

The pursuit for inclusion is a further major cause for the increased competition:

“We feel it [the increased competition], we see that parents, actually quite a few, say; ‘we don’t want our child to be in a class together with these difficult or noisy children, so we will move to the private school’. Unfortunately quite a few sees it this way, and it’s difficult to manage. But we try to establish a shared understanding. But it’s also part of a larger trend, people are getting more and more self-obsessed – community and solidarity are not as highly rated nowadays” (I C lin.589ff).

The de-selection of public schools affects the composition of pupils left at the responsibility of the public school system. This, the administrative coordinator of District 2 notes, affects the basis for fair competition and makes the task faced by the public school more difficult:

“the school [the local private school] can be completely full. Then a seat opens up and they call-up one of ours, who is on their waiting list, and we get the kid they expelled because it needs extra support. This is the harsh reality. In my opinion we shouldn’t use it negatively. I think we should use it for marketing – stressing that we don’t expel children – we try to integrate all in our public school, and we try our best not to let anyone suffer from it; neither the strong nor the weak” (I D lin.340ff)

## 9.8. EVALUATION AND CONTROL

Quality and budgetary related control is also included in the funding model, together with procedures intended to monitor the use of special needs services.

### 9.8.1. BUDGETARY CONTROL

A range of means are employed as to ensure budget compliance, including face-to-face meetings and quarterly accounting reports. Meetings between the administration and the principals take place on a regular basis and here, District 1’ principal explains, budgets and the general situation of the school system are discussed:

“We discuss budgets, at a general level, you know, for the system as a whole...there I get involved at an early stage, become informed. I don’t have anything to say per se, but I get informed; that this or that is in the pipeline and that I can expect a proposal from the sector” (I C lin.123ff.)

The budgetary situation is also a topic at the weekly meetings for the local management team, the principal of District 2 explains: *“We go through the entire budget as it looks at the moment; what has happened; what are our plans for the future, where do we for example need to adjust? If a department head has special wishes or needs, this is where we discuss them”* (I F lin.544ff.). Involving the department heads in the budgetary situation is a way of giving them some scope for action and a sounder base upon which to make decisions, the principal stresses:

“For the pedagogical leaders the yoke is thrown off. They can return with the assurance that; ‘it’s okay if we invest in textbooks for geography’ or ‘now we know there is room for a trip in 3<sup>rd</sup> grade’. This freedom makes a difference for the department heads” (I F lin.212ff)

Additional meetings are also held among the administrative coordinators. The intention is here to establish knowledge-sharing across districts. Budgets are parts of the

agenda, as well, as more general problems associated with the administration of schools. Furthermore meetings between the management and teachers are also a recurring thing. These are mostly devoted to pedagogical and educational discussions and the budgetary situation of the school is not a regular agenda item. In fact, the administrative coordinator of District 2 explains: *“I might include it once or twice a year, but that is all. If the teachers feel that things are working from day-to-day, they are actually not that interested”* (I D lin.541ff.).

Quarterly accounting reports are further developed by the management and submitted to the *Children & School Committee* for approval. From the perspective of the administration the process and subsequent approval is intended to ensure a recurrent local focus upon the budgetary situation of the district. In turn, the hope is that transparency and stability can be created. Apart from the master budget, the actual budget and the budget variance for each school district, the reports also contain a prognosis for the year based on accumulated accounts and with it an estimated budget variance. In case of a deficit the report contains a short description or action plan for how the management intend to solve this, with comments on the associated long-term effects. The budgetary control thus focuses narrowly on budget compliance and does not directly take into account connections between actual activities and subsequent effects. The control process does thus neither compare nor study the efficiency, productivity or thrift with which resources are utilized at the individual school. Deeper benchmarking analysis of results is not included and the system measures purely the ability of the districts to comply with their budget.

Table 9.3 summarizes the districts’ ability to comply with their budget and estimate their final results when conducting the follow-up in October.

Forecast of final results at the last budget follow-up in October		Actual result
2009	09.10.09 District 3 announces that 101% of the budget has already been spent. The remaining districts expect to comply with their budgets.	Half of the districts end up with a budget deficit, while the last two carried forward surpluses
2010	Three districts expect to accumulate deficits, due to decreasing pupil numbers and increased spending on special needs education	3 districts ends up with deficits, albeit one lesser than expected. District 2, ends up with a huge surplus
2011	All four expect to comply. One district notes that the prior accumulated deficit will not be brought down, and another that overspending will occur, but that an unexpected intake will lead to a surplus nevertheless.	3 out of the 4 districts carried forward surpluses, one of which was relative high. The fourth district carries forward the accumulated deficit.
2012	Three out of the four schools expect to be able to meet their budget and to accumulate surpluses. District 3 expects to comply with the budget, albeit not being able to bring down the accumulated deficit.	All districts carry forward surpluses



2013	Due to the national lock-out all four schools have spent less than budgeted and thus expect to comply with their budgets.	All four districts carry forward surpluses.
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- *Table 9.3 Budget predictions at the last budget follow-up in October and final result, 2009-13. Source: Budget follow-ups & 'Results', 2009-13<sup>13</sup>*

Overall, the table shows, that the districts in general have complied with their budgets and been somewhat precise in estimating their final results. Since 2010 all four districts have carried forward surpluses. District 2 has over the course of the period been able to carry forward relative large surpluses (although in 2011 this was only due to an extra intake). As the budgetary control system only takes into account the districts' ability to comply, the deeper cause for why especially this district has been able to continuously generate a relative larger surplus, is not examined more closely. As such, it is difficult to say whether this springs from more efficient or thrifty use of resources, or if it has something to do with the concern that differences in socio-demographic profiles are not covered fairly by the allocation.

The large deficit created in 2009, due to overspending on personnel, has followed District 3 ever since. Although the district since 2011 has complied with the budget, it has not been able to bring down decisively the accumulated deficit. In 2009 the overspending had great consequences for the management team, in that, the principal was dismissed and a new management team had to come up with a detailed plan for the turning around of the budgetary situation in addition to the submitting of monthly budgetary follow-ups to the *Children & School Committee* (CSC 14.01.10, head 4). This shows that a district cannot expect to be saved by supplementary grants. Rather deficits must be carried forward, and the management must explain how they expect to solve the related problems. In turn however, following the initial sanctions the school has avoided additional sanctions despite the fact the deficit has not been brought down. The only time that a supplementary grant has given to the school sector is in 2009 where a huge budget overrun, prior to the devolvement of special needs educational funds, was generated both centrally and locally. Here a supplementary grant was given in order to cover the unexpected expenses.

### 9.8.2. QUALITY CONTROL

Quality control in the form of a yearly Quality Report is considered to be the main control tool implemented to ensure a systematic documentation of the service quality. The content of the report is developed by the *School Sector* and through the report a close collaboration between the political, administrative and local part of the

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<sup>13</sup> CSC 03.12.09, head 119; 02.12.10, head 128; 22.12.11, head 165; 06.12.12, head 111; 18.12.13, head 2 & MB 29.04.10, head 56; 31.03.11, head 23; 24.04.12, head 47; 25.04.13.1; 27.03.14, head 2

municipal system is intended. The report evaluates local fulfillment' of the political objectives (the ones presented in section 6.2), and as a part of the control process, the report is presented to the school boards and the *Children & School Committee*, before being ratified by the *Municipal Board*. Afterwards it is then made public.

Parts of the report is devoted to evaluating efforts taken since the last report, while the rest contains key-figures used as a basis for evaluating current performance. Information about the schools, the number of pupils, class sizes, national tests and examination scores, and information on special needs education and transitions into further education is included. Here, the figures are used to assess the individual districts attainment of the political objectives. This is done on a three point scale from "fulfilled" (green) over "partly fulfilled" (yellow) to "unfulfilled" (red) and in connection to this the management evaluates the associated efforts taken. Accountability patterns are thus sought clarified and elucidated by making the school management explain each result and requiring them to state how they intent to improve the results in the future. Benchmarking across districts is further made possible although there is not a deeper analysis between results and actual spending patterns.

Although the quality report at the outset is intended to create transparency and accountability for results, from the perspective of the management, the development process also entails more interactive and forward looking aspects. When explaining how the quality report is used, a department head from District 1 notes, how the process creates an opportunity for broader more factual discussions to take place:

"Where should our focus lie, because we didn't performance well here or we did really well here? In this way it's an evaluation tool which enables us to see what we must address next. We're being scrutinized and things become more visible. There isn't so many "I think", instead more concrete and factual matters are brought to the table" (I B lin.272ff.).

The process thus opens up for discussions and constitutes a recurring opportunity for discussing strategic concerns and potential challenges in a more broad and long-term perspective. As a part of the process a range of meetings are held and as with the budgeting process, District 1' principal explains, this opens up for a broader part of the organization to be included; *"the principal discusses with the rest of the management team and with the employees in the Employee Committee, and lastly the objectives are passed on to the rest"* (I C lin.154). This, he notes, facilitates debate and ensures that *"we conduct a thorough evaluation on each of our goals and give us an opportunity to rethink new ones"* (I C lin.147). The threat of political scrutiny is seen as an important, although at times complicating factor. However, without continuous awareness from both the administration and the politicians, a department head from District 2 emphasizes, the report risk losing its meaning:

"A follow up is needed by the politicians and by the sector as well. That we're held accountable for what we write...continuous evaluation is

needed; then it can be used as a starting point for discussions on the future activities of the school system” (I E lin.165ff.).

### **9.8.3. SPECIAL NEEDS EDUCATION CONTROL**

Procedures implemented in order to monitor the use of special needs education constitute the final part of the formula funding model. This includes yearly reviews on the development of the use of special needs education, submitted to the CSC for assessment, and a more informal “ethical code” on what constitutes proper local management in relation to special needs education (07.02.13 head 5).

The yearly review depicts the actual development in use across and within districts. In this way, it is possible to see in which special needs classes services are given and from which schools the pupils are coming. As for the so-called ‘code of ethics’, this is signed by the school management, who thereby agree to refrain from taking back pupils enrolled in special needs services at other municipal schools after the expected level of needs has been assessed in December (07.02.13 head 5). Promising, in fact, not to take back the child for at least the next school year (03.04.14, head 4). The code of ethics so to say specifies what is to be understood as good governance i.e. not taking measures which will compromise the budget base of other districts, or allowing budgetary concerns to compromise educational and pedagogical aspects.

As a result, through the codex districts with special needs classes and schools are given a more predictable base upon which to plan. The codex, it is argued, is thus intended to create a shared sense of responsibility and trust across the management teams (07.02.13 head 5). It can however be argued, that the code actually goes against what is otherwise stated as a main objectives of the school system, namely that of increasing the inclusiveness of the public schools. In principle, if following the code strictly, it is not, the actual needs of a pupil which determine when inclusion is pursued for a particular child, but rather the time of the setting of the budget. As such, the codex is as much, if not more, concerned with ethical treatment of one’s peers, than that of describing what would be considered ‘ethical treatment of pupils’.



## **CHAPTER 10. BUDGETARY RISK & COMPETITIVE PRESSURE, MUNICIPALITY A**

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### **10.1. INTRODUCTION**

This chapter analyzes the above presented formula funding model in the light of the framework developed in Chapter 7. The level of competitive pressure and the level of budgetary risk imposed onto the districts by the formula funding model are thus studied and the model is placed at its relevant position in the rectangle of Figure 7.4. Hereafter the inherent incentive structures of the model are studied, thereby enabling a discussion of the theoretical practice created by the formula funding model.

### **10.2. LEVEL OF BUDGETARY RISK**

The formula is composed of a combination of approaches. For general education and pupils in special classes, referred centrally and locally, case payment inspired approaches are used, while funds for inclusive services are allocated through a capitation payment. This makes the districts responsible for a substantial part of the funds, leaving only a few specific matters at the hand of the administration (severe special needs services, the cost of new comers and the cost above the threshold price paid per pupil in particular special needs classes). The schools are thus responsible for general education, for creating inclusive services (supplementary teaching, individual or group integrated services) and for special needs classes as well as for deciding whether the needs of a particular child is better met by acquiring external services. The scale of budgetary devolvement together with the comprehensive payment attached to each pupil enrolled in principle places vast budgetary risk with the schools. In that, these are not only responsible for an extensive part of the funds for education but the budget is also highly dependent on the pupil enrollment levels. Yet, a range of factors in effect lessens the level of budgetary risk.

Case payments usually imply that the payer retains the risk of upward changes in activity, whilst the budget holder is exposed to downward changes. The non-existence of downwards adjustments in Municipality A' model however changes this. As illustrated in Figure 10.1 this decision profoundly decreases the budgetary risk, because school districts are not exposed to the risk of decreasing enrollments; meanwhile enjoying the full benefit of attracting additional pupils (at least so long that the payment  $p^i$  covers the associated costs of that particular pupil). With case payments the budget holder bears the case intensity risk, i.e. risk emerging from variations in educational needs not covered fairly by the accompanying payment. The budgetary risk associated with enrolling a particular pupil may therefore be influenced by the concerns raised over the precision by which the model compensates patterns of actual needs. The payment  $p^i$  may due to the different socio-

demographics conditions not compensate all district fairly for the actual needs of the pupils enrolled, making the budgetary risk to vary across districts. Moreover, with the introduction of district management, the management must so to say bear the budgetary risk associated with having to use funds across multiple departments with very different abilities to attract extra pupils and thus become self-financed. The latter risk was earlier handled at a central level.

For special needs education case payments, which vary according to the services in which the child is referred, are applied. The allocation is based on actual enrollment numbers December 2011 and the level of allocation is not adjusted. This lack of adjustments means that the allocation (the same goes for the general education allocation above) comes to be based on a sort of expectation of outputs, rather on actual enrollments or needs. The model hence comes to resemble a capitation payment approach, with risk adjustments schemes varying according to the needs of the pupils – without however the associated risk of decreasing activity levels. All in all, the non-existence of downwards adjustments to the spending frame brings with a very definitive and stable budget base upon which school districts are to operate. In fact, the minimum is set already in February. This heavily reduces the budgetary risk and means that schools are hardly exposed to any risk stemming from the uncertainty connected to not knowing the size of the final spending frame.

The funds for creating local special needs arrangements and inclusive services (supplementary teaching, individual or group-integrated services or special needs classes) is allocated as a fixed amount, thus resembling a capitation payment inspired approach. The schools are here given the same amount for establishing internal special classes in the in-schooling and middle-school forms. Actual variations in needs are not taken into account and each district must bear the budgetary risk associated with rises in needs. The associated risk may here however be reduced slightly by the ongoing drop in pupil numbers, albeit some districts, as remarked above, may be subjected to harder conditions due to their social- demographic profiles. All in all, the funding aimed to provide special needs education and inclusive services are thus based on an expectation of needs. Although all needs must be met within the fixed budget, the overall construction of the funding model means that funding cannot fall below the originally allocated amount. The districts thus bear the risk of rising needs, but are protected from reimbursing funds in case of a decreasing level of needs. The cost sharing arrangement for new comers further reduces the risk associated with unexpected needs, in that, the probability of completely unforeseen needs cropping up is reduced. The budgetary risk is thus lessened compared to a pure capitation based allocation.

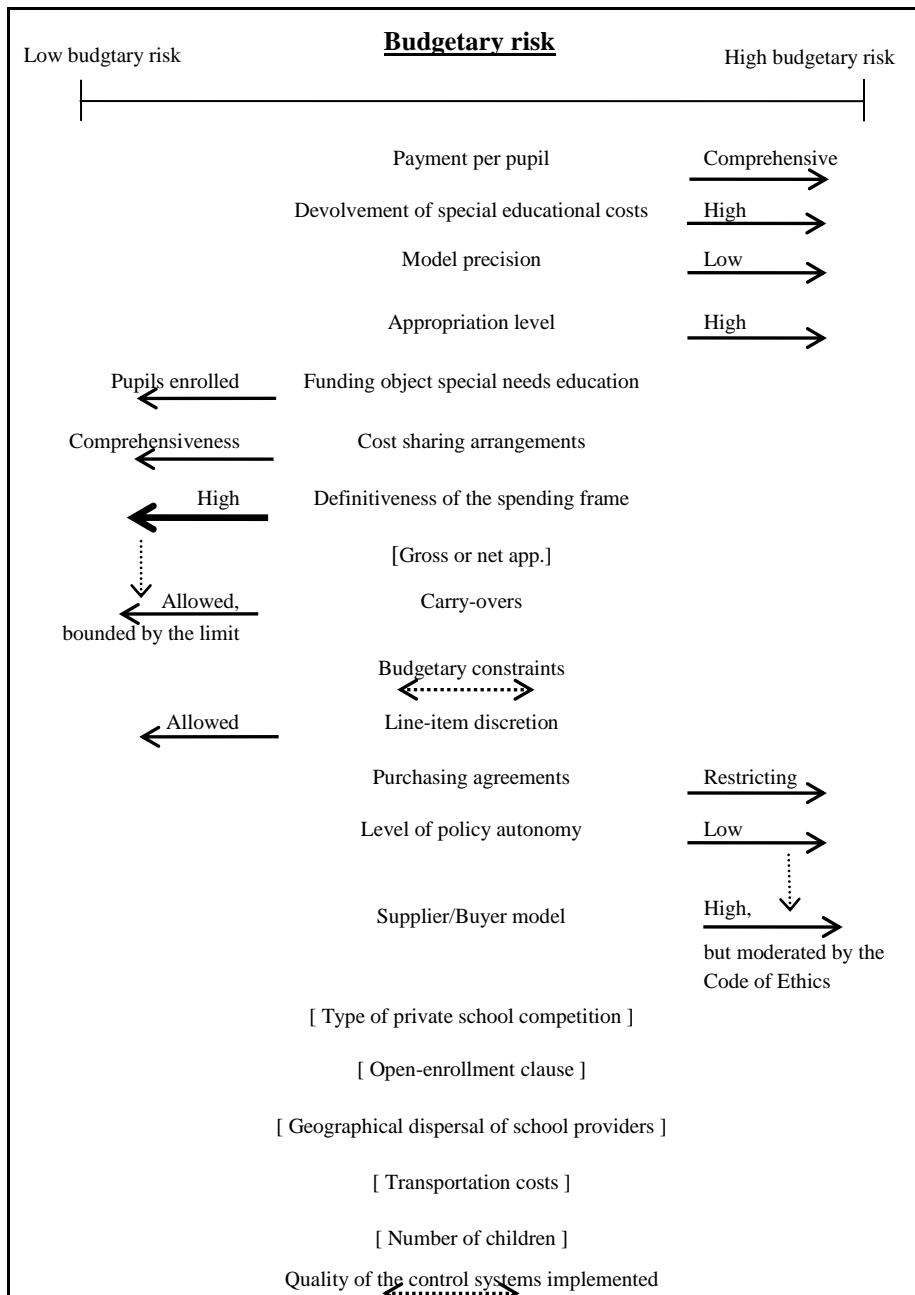
The appropriation level and with it the division of responsibilities leaves a range of decisions at the hand of the local management. Yet, a main source of budgetary risk come to stem from the part associated with internal special needs services. Here the pursued ‘supplier-buyer’ relationship for special needs services comes into play.

For the 'buyer-school' the budgetary risk lies in the danger of not having a sufficient level of funds to cover the actual pattern of needs. The buyer-school must determine whether the externally supplied services are worth their cost or if such funds could be better used internally in the district. Allowing the districts to establish local special needs classes is here vital in creating a real choice. The full budgetary risk is placed with the local management if the pupil attends internally provided services. In turn however, they avoid paying the monthly fees giving them a larger scope for action over how funds are to be spent. Yet, such a decision may come to affect the local teaching environment.

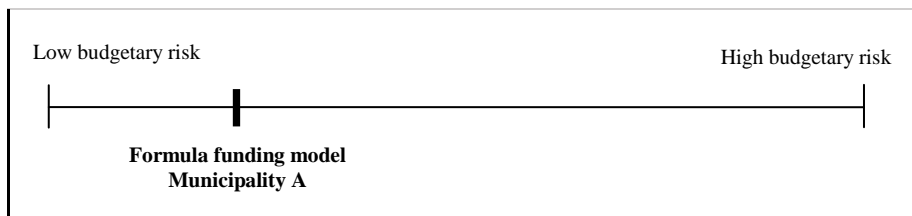
The 'supplier-school' must in turn ensure that the services supplied meet the required standards in order to uphold enrollment levels and their budget base. If not, the choice given to the schools through the devolvement, means that they are continuously exposed to the risk of the buyer-school choosing instead to re-include pupils in their own services. Here however, a range of factors reduces this immediate risk considerably. For the district responsible for the two special needs schools, such concerns are only relevant for the department catering to pupils with "relative lesser needs" as the other is covered by a municipal cost sharing arrangement. The budgetary risk for supplier-schools thus mainly stems from the services to which referrals are made at the district level. Here, however, the 'code of ethics' may come to hamper the intentions of the supplier-buyer model; as the code, more or less, makes it a matter of ethics for a school to change its practices after the setting of needs in December/January. As a result the imminent risk associated with varying demands will decrease considerably.

Line-item discretion and the decision to allow carry-overs further amend some of the risk placed with the districts. Line-item discretion for example reduces the risk of being accountable for the vast part of the education funds, giving the management the opportunity to spend funds on a different pattern than otherwise indicated by the original allocation without fear of subsequent budgetary implications. This is reinforced by the ability to carry forward funds. A more long term budget perspective can be created, limiting the risk of not spending all funds up front. The 10 % limit however means that the districts by default cannot expect to carry forward all possible funds saved. The budgetary benefit of being allowed to bring forward unused funds must though be weighed against also having to bring forward potential deficits. Albeit the margin for sanctions in relation to overspending is widened this affects the local budgetary risk upwards. Here also, very large overruns is accompanied by immediate budgetary and managerial sanctions. Taken all together the budgetary constraints of the model are thus neither particular hard, as overspending is allowed, nor particular soft as the districts cannot expect to be saved by additional funding. The cost sharing arrangement covering the cost of the geographically remote department however elucidates the fact that it is possible for service providers to lessen the budgetary risk placed upon them, if they can present proper arguments

for their case. Likewise, the quality control brings with it no immediate budgetary risk and will thus only act as a mean to control and monitor behavior in the long run.







- *Figure 10.1 The impact of the Municipality A' control components on the level of budgetary risk created*

In sum, although the size of the devolvement together with the dependency on pupil enrollments at the outset places a high level of budgetary risk upon the school districts, a range of decisions blur and may even invert the original intentions. This to such an extent that the budgetary risk becomes comparatively low. Although the management remains exposed to some budgetary risk, mainly arising from the devolvement of special needs funds and inclusion-related matters, the non-existence of budgetary adjustments to the spending frame means that the budget is determined extremely early; respectively in February for the general education and potentially already in December/January for the special needs funds. This greatly reduces the relative risk placed upon the providers, who not only comes to know their actual spending frame well in advance, but also get a stable base upon which to plan or act.

### 10.3. LEVEL OF COMPETITIVE PRESSURE

A core merit of case payments is that they attach a payment to each pupil enrolled, thereby creating a direct link between enrollments and local budgets. The comprehensive payment, which Municipality A' model attaches to each pupil enrolled, means that districts have a strong budgetary incentive to focus on upholding high enrollment levels. When combined with the existence of a competitive provider's market consisting of both public and private competitors, the substantial amount attached to each pupil should in principle create the conditions needed for a competitive market for education services. Through the devolvement of budgetary authority such education services may not only encompass general education, but also more specialized services for pupils with special needs. Yet a range of decisions may hamper these intentions, which in the context of special needs education includes the limited number of "seats" in these services together with the ethical code.

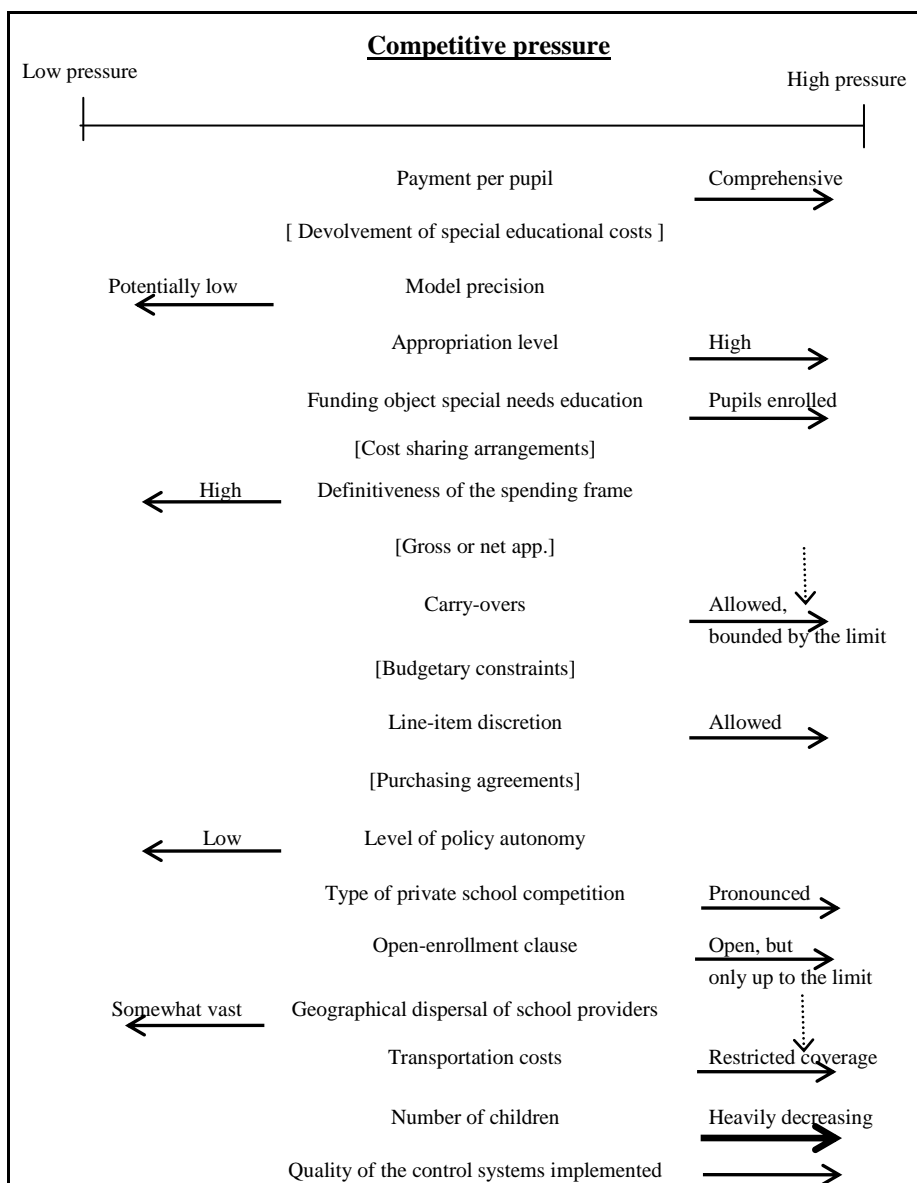
Firstly, the close connection between the budget size and activity level is somewhat lost for the public schools in Municipality A's model. The lack of downward adjustments means that there is no immediate budgetary effect associated with decreasing enrollments (in fact this effect is completely postponed to the following cycle), whereas the budgetary benefit of enrolling an extra pupil depend on when the child is enrolled. If enrolled outside the time period from February to October the full budgetary effect is postponed to the next allocation cycle, whereas an enroll-

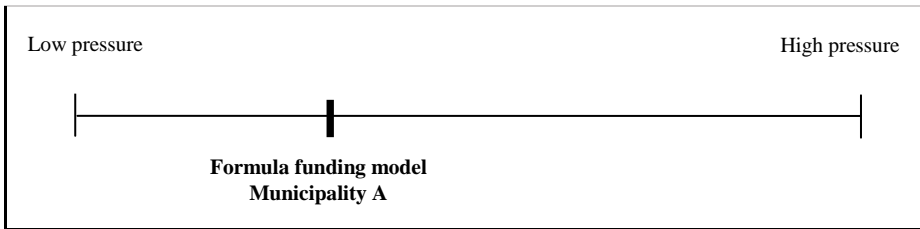
ment within this period is immediately compensated by the payment  $p^i$ . The fact that schools are ‘only’ compensated with the payment  $p^i$  may however affect their willingness to enroll pupils with special needs. When combined with the potential lack of precision by which the allocation compensates districts for the needs of their pupils, this may affect the effort invested in pursuing extra enrollments, in particular pupils with known special needs. This is further reinforced by the fact that the rest of the allocation is based on a capitation principle, making it independent of actual needs. Consequently, all needs must be covered within the allocated budget, again affecting the willingness to enroll all types of pupils. Together, these factors and the lack of downwards adjustments mean that the model comes to be built on expectations, thereby making it resemble a capitation payment approach, and as visualized in Figure 10.2, these decisions affect strongly the competitive pressure.

The scope of devolvement can, in the context of competition, be seen as a mean to encourage providers to develop services in tune with user’ demands, which when combined with the publication of education results is intended to encourage the district to focus on means to ensure high enrollments. The geographical placement of the public and private providers makes competition most likely to occur in the town environments, where the availability of schools and pupils is greater. This is not at least reinforced by the fact that all the private schools are located close to a public school department. The geographical distance between departments may thus intensify the competitive pressure, albeit the decision to only reimburse transportation costs for pupils enrolled in a home-district department, or in special schools, may restrict free choice for some. The latter is especially the case for pupils living outside the town areas where the geographical distance between departments may in effect affect a pupil’s ability to enroll in another public school department. Important in this context is the enrollment clause, which restricts extra intake of non-district pupils when a class reaches 24 pupils. Albeit, the clause at the outset gives pupils a wider choice of providers, *in casu* enhancing the competitive pressure, ‘sought-after’ schools may find that they are unable to enroll as many pupils as they want. In town environments where class averages are higher, the clause may in effect entail that schools are forced to turn away pupils. At the same time however the competitive pressure is higher here as a result of the increased choice of providers available. Thus, if the specific class has less than 24 pupils a competitive market for public schools is available for those able and willing to pay the cost of transportation. Above the limit, districts are only able to enroll home-district pupils as these are not subjected to the clause, thereby making the only competitive target the number of home-district pupils enrolled in elsewhere.

From a private provider’s perspective the case payment attached to each pupil enrolled gives a continuous budgetary reason for upholding high enrollment levels. As seen, the private school rate is relative high with 25% of the pupils enrolled in private schools. This is despite the fact that some of these schools cater only to specific segments, either in the form of pupils with special needs or pupils seeking a more

religious foundation for their schooling. The availability of “seats” is further limited as most of the private providers are one-entry schools, with some only allowing 18 pupils per class. All pupils wanting to enroll in a specific private school may potentially not be able to do so. The competitive pressure put on the public providers thus stems mainly from the private schools and here it is important to note that the public schools feel themselves to be competing on uneven ground when it comes to private school competition. This may make the perceived pressure seem even higher.



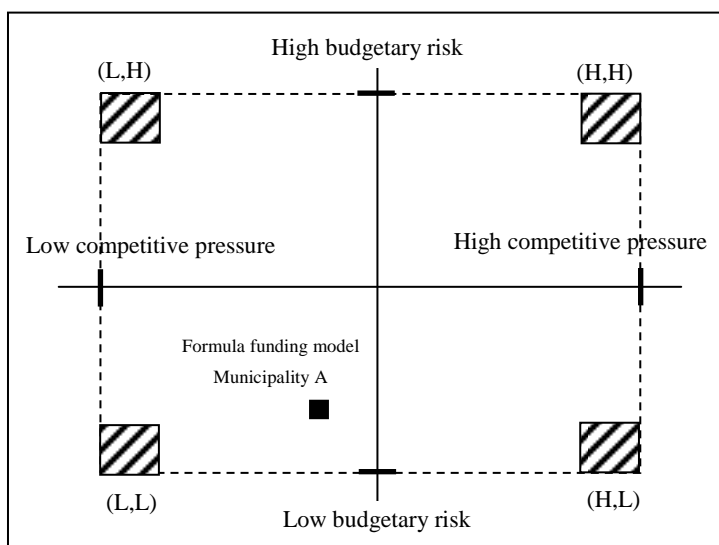


- *Figure 10.2 The impact of the Municipality A's control components on the level competitive pressure created*

In sum, the relative high private school rate shows that the public schools are strongly affected by the private providers. Yet, the design decisions come with mixed incentives for competition, with the lack of adjustments especially hampering the creation of competition and with it the competitive pressure placed upon the public providers. The ongoing decrease in pupil numbers, which the municipality is subjected to, however become vital, in that, it may overturn the otherwise incentives, making it desirable from a more long term budgetary perspective to enroll additional pupils. The latter affects the general evaluation of the competitive pressure greatly and as visualized in Figure 10.2 this places the funding model in a relative or somewhat modest level of competitive pressure, a position which potentially may be moved to the left by the geographical placement of the specific district.

#### **10.4. MANAGERIAL PRACTICE - LOW BUDGETARY RISK/MODEST COMPETITIVE PRESSURE**

The funding model thus becomes placed in the lower left quadrant of Figure 10.3; a position created through the combination of a low level of budgetary risk and a relative/modest level of competitive pressure. In the following section the managerial practice created in the light of the model's incentive structures is discussed. A main point, in this context, is the non-existence of downwards adjustments as this implies that the allocation comes to be based on a sort of expectation of outputs, despite the original use of case payments. Instead the model comes to resemble a capitation payment approach, with risk adjustments schemes varying according to the needs of the pupils – without however the otherwise associated risk. The general incentives are thus inverted. For example the base incentive for productivity through increased output levels is hampered by the decision to leave districts unaffected by decreasing enrollments. Further, the construction also brings along the possibility that the municipality may be exposed to adverse behavioral responses associated with both types of payments, possibly without the associated benefits of case payments. In the search for efficient use of funds this is of course problematic.



- *Figure 10.3 Managerial practice Municipality A, created as a result of the combination of a low budgetary risk and a modest competitive pressure*

The low budgetary risk combined with the relative/modest level of competitive pressure created by the formula funding model brings with it few incentives for the providers to uphold a high level of productivity. The short-run motivation for enrolling a pupil may depend on when over the course of the year a child is enrolled. If the associated budgetary risk is too vast, either because the model does not compensate fairly actual patterns of need or due to the lack of reimbursement for extra enrolments outside the period of February to October, this may cause districts to refrain from focusing on entry levels. The management may as a result be motivated to erect barriers or take part in other means intended to depress the immediate access to services. A type of behavior otherwise only associated with capitation payments. Such type of behavior is especially prevalent in connection to pupils with special needs, in that, an extra enrollment at best is covered by the payment  $p^i$ . The severity of a pupil's needs, can therefore more broadly affect the desirability of enrolling particular pupils. This behavior is of course limited by the fact that districts are required by law to enroll any pupil belonging to their own district, but it may reduce the eagerness of bringing children with special needs back to the school. Two factors however have the opposite effect. The size of the  $p^i$ 's and the general decrease in pupil numbers. The relative high amount attached to each pupil enrolled means that high enrollment levels is still a vital managerial concern, which, when combined with the decreasing pupil numbers, may give the management a more long-term budget perspective, inducing them to ensure and uphold high enrollment levels.

As for efficiency, case payments usually incentivize budget holders to act prudently and efficiently in their use of funds, focusing on attempts to lower unit costs. Capita-

tion payments on the other hand bring into focus that of lower total costs. The overall design of Municipality A' model makes the latter type of behavior most likely, especially in terms of the funds intended to create inclusive services. The general idea is that the management through the devolvement will (re)include pupils in the general environment, as this gives them a greater level of freedom over how funds are to be spent. Although the overall budgetary risk is low the idea behind increasing local accountability for spending is, that this will induce the management to use funds more appropriately. The decisive nature of the budget is intended to force the management to come up with solutions tailored to the needs of the pupils. The hope is that the future guideline for when and in what circumstances help is to be given is the needs of the pupils. This is in contrast to the previous strict system where a pupil was allotted a fixed number of extra support lessons based on a diagnosis which could be quite delayed. The magnitude of this incentive is reinforced by the size of  $p^i$ . The relative dependency on pupil numbers means that it becomes important for the management to retain pupils within the overall budget of the district. Not only will successful inclusion allow districts to keep the pupil dependent allotment, but also all funds associated with special needs services. The management can if able to create appropriate educational environments for inclusion meet the needs of their own pupils better and possibly also widen their budgetary base by offering their services to other schools. Failing to provide services which are not at least as good as the ones in which the child was previously enrolled makes re(inclusion) problematic from the perspectives of the pupils. The danger is further that funds intended for inclusion instead is spent on pupils in local (segregated) special needs classes, making the quest of inclusion possible more fictive than real. In this context also the ethical code may have a negative influence on the intentions of inclusion. Despite feeling prepared to re-include pupils the management may as a result of the code refrain from doing so thus affecting the efficiency by which funds are used and the responsiveness of the system in general.

The focus on lowering total cost may bring with it another type of unwanted behavior, namely that of depressing services. For the inclusive services the danger is that the needs of the pupils is not sufficiently met due to the restricting nature of the fixed budget. This is especially prevalent for services such as additional support and group-integrated services as these are no longer classified as special needs education. The former regulation and rules are no longer in place, making it more difficult to control whether the children are receiving the needed help. Similar adverse behavior could also occur in relation to pupils in special needs classes, in that, the management in the pursuit of a larger, stable budget base could be induced to refrain from referring pupils to the externally supplied services due to the associated cost. The danger is that the management, instead of acquiring external services, keeps the child in local services, thereby retaining full decision-making freedom over the funds. As discussed such behavior is beneficial if similar services can be created through the larger budget base. If however the needs of the pupils are not sufficiently met this behavior becomes adverse in nature.

Adverse behavior in terms of up-coding and the shifting of cost may also be present. Such behavior may be created by the use of different types of payments as well as the existence of cost sharing arrangements which removes completely local budget responsibilities for particular pupils. Although the capitation allocation covering the major part of pupils makes the shifting of cost difficult the possibility still exist. For example in terms of newcomers to the municipality, since the cost of these is overtaken by the administration if their associated needs are greater than what can be handled in the home-environment. The incentive structures created could thus motivate providers to transfer the responsibilities for these to the administration.

Up-coding can occur in connection with special needs classes. Since these funds are based on actual enrollments the district could be motivated to uphold the current level, instead of implementing active means to reduce the use of such services. The difference in the budgetary effect of having a pupil enrolled in special needs services covered by the district contra the administration, may bring about up-coding behavior. The district must in the first case pay the fee for the particular service and on top of this it loses the pupil-dependent allotment because the child is no longer enrolled in a district service. If however the child is referred to a service where the budget responsibility is held by the administration, only the pupil dependent payment is lost. This makes these types of service relative more attractive from a budgetary point of view. Furthermore, if such referrals can be made and approved after the setting of the spending frame, the financial consequences of such decisions are further reduced as the district's budget is not correspondingly reduced. Thus, if schools before September 5<sup>th</sup> succeed in referring a child to a school where the budgetary responsibility is held by the administration, they will not lose the pupil dependent allotment, the new school will be compensated, and their budget will not be reduced.

The low level of budgetary risk brought upon the providers by the model thus gives few incentives for efficiency. Illustrated for example, by the upper bound on carry-overs. This may motivate 'spending to the budget', as well as the fact that the administration runs the risk of paying for the same pupil twice. In sum, while the low budgetary risk brings with it a stable and definitive base upon which to plan, the needed incentives for prudent and efficient resource utilization may not be created. Rather, this type of efforts together with incentives for quality improvements may be created by the moderate/relative level of competitive pressure inflicted upon the providers by the model. The long-term incentive to focus on enrollments together with the imminent pressure from private providers may create a more long-term driven motivation to focus on education-related results as a mean to uphold high enrollments. How present this concern is depends on the associated response from the side of the administration and the political system and not at least from the parents and children when choosing a school. From the perspective of the public schools the ability of private providers to engage in cream skinning may in this context affect their perceptions and ability to actually counter private sector competition, and if so this will leave the public school system with a more difficult task.





## **CHAPTER 11. PRACTICING SCHOOL MANAGEMENT IN MUNICIPALITY A**

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### **11.1. INTRODUCTION**

“It’s of vital importance to be geared to the future, due care, to be able to adapt according to the future which is already apparent” (B lin.614-15)

So, a department head of District 1 describes, the essence of school management. Part III has thus far studied the theoretical implications of the formula funding model design on managerial practice. In the light of this, the purpose of this chapter is to present how school management is actually practiced. The account will focus on the guiding principles affecting the local management in their daily practice, and will show how educational concerns are weighed against the inherent incentive structures of the model. In the concluding part of the chapter the managerial practice will be compared with the fulfillment of the political objectives, in this way highlighting whether the practice created is in line with these objectives.

### **11.2. MAKING SURE PUPILS ENROLL**

Although the notion sometimes can be difficult to instill in the teachers, there is with the school management a clear understanding that being able to retain and attract pupils is a vital part of successful school management. Not only is it needed in order to secure the financial viability of the school, it is also, a way to maintain and create quality. The increased budgetary and decision-making freedom associated with enrolling an extra pupil, the administrative coordinator from School 1 notes, gives way for funds to be spent as the management see fit:

“If we’re able to attract one extra pupil it counts for 50-55,000 DKR ... Roughly, say we have a class with 20 pupils. Then if you are able to attract two more it corresponds to 100,000-, which we don’t have to use on salary as this is already covered. Thus, we can spend the 100,000 on something else; therefore it is stupid not to try to attract” (I D.lin.357).

Although the budget in the short run is unaffected by a pupil leaving the school, the need to attract pupils is precipitated by the continuous and rapid decline in pupil numbers. Accordingly, District 1’s administrative coordinator argues, if the district as a whole is not able to retain at least its “own” pupils the budget will be affected immensely:

The better we perform, the more content parents are the happier the children are, the more likely it is that people think this is a good school...

Each time a pupil leaves, each time we don't succeed in creating a good collaboration with parents, or something else goes wrong we lose 50,000 and 8-10 pupils correspond to one teaching post" (I A.lin.259).

Thus, a coherent and coordinated approach for attracting pupils must be established. This, it is argued, includes creating high quality of service, establishing a strong co-operation with the kindergartens and engaging parents in the life of the school. More broadly marketing the schools to potential users, securing that the general reputation of the school in the local community is good. Establishing a strong relationship with parents is all important, especially as a mean to prevent that the parents opt for a private provider. Attracting parents, who consider private schools, for other than religious reasons, is especially vital, a department head from School 2 stresses. As these parents tend to be well-resourced they often contribute and have a positive effect on the educational environment of the class and on the school in general. The strategy thus becomes that of *"making them realize that they are actually not getting anything extra for their money, in turn, we can give their children a more diverse outlook"* (I E lin.318).

Being successful in upholding high enrollments however requires a good reputation, the principal of District 1 stresses. A bad reputation can rise very quickly if *"buildings are ill-maintained, the academic results are bad; if the general perception in the community is that there are a lot of disruptions in the classes, and generally when specific cases [enkeltsager] reaches the press"* (I C.lin.490). Maintaining a good reputation, being aware of how the school is perceived in the local community, has thus become a vital concern for the management. In the efforts to maintain a good reputation, marketing to potential users becomes increasingly important, the principal of District 2 stresses. This entails getting the good stories out to the surrounding community:

"We believe that getting people to talk about the school will have a positive effect. Hence, we're very self-aware, ensuring that the school is in the media at a regular basis; with our new initiatives, activities and so on, communicating what's going on" (I F lin.267).

In this context, the teachers play a crucial role in spreading the good stories. Being the daily direct link between the school and parents, the teachers, District 2' principal explains, are important ambassadors for ensuring that good stories come to resonate with parents: *"they're some of the best at spreading the good stories to parents, from there they will disseminate further"* (I F lin.273). The management team, he argues, is accordingly highly aware of how the employee meetings represent a vital opportunity for getting the good stories out to the teachers, creating a positive environment that incites and motivates them to talk positively about the school. A good reputation, a department head from District 2 notes, is however not enough. Rather a substantial and coordinated effort is needed when potential pupils are to be attracted:

“We can no longer expect that parents will come to us if we sent out a gray piece of paper. Thus, it starts already in the kindergartens where we try to get in touch – sending out cool [lækre] materials, trying to coordinate enrollments between the after-school care and the school, in order to show that we are an integrated unit. Arranging open-house events – just in general trying to learn from the private schools, because there are no doubts in people’s mind what they stand for” (I E lin.333).

Such a coordinated, cross sectional co-operation has slowly become a key area of focus for the teams. The actions of other schools, being successful in attracting non-district pupils, have affected the efforts taken in District 1, the administrative coordinator explains: “*now we react, last year we didn’t and we became the ‘small’ so to speak*” (I A.lin.223). In order to counter the increasing competition their efforts now include collaborating with the kindergarten, arranging visits to the school and letting the older kids spend afternoons in the after-school care during the spring prior to their school start. Similar actions are taken in District 2, the principal explains. The intension is to make parents and children familiar with the school and its employee; a familiarity which hopefully will lead to the development of a sense of belonging, reducing the likelihood for a private solution or another municipal school being chosen at the expense of the local school (I F lin.299).

The quality of education is however also important for attracting and retaining pupils. In fact, District 2’ principal explains, as pupil numbers reduce, quality becomes a competitive element. The department structure has enabled three out of four districts to gather all senior pupils in the same department. This, District 1’ principal explains, is important in the context of quality: “*the individual teacher had to decide whether they preferred working in the in-schooling department or in the department with the older pupils*” (I F lin.311ff). By working with the same age group the individual teacher attains a deeper understanding and knowledge of how to teach that specific level. Gathering the older pupils in fewer classes has in District 1 further ensured that all teachers teach in their main subjects, giving: “*the needed boost, and for us it’s a crucial part of what can be termed quality in a public school context*” (I F lin.365ff.).

The department structure, District 2’ administrative coordinator notes, has further made it easier to retain the pupils within the budget of the overall district. If a pupil for some reason is having problems or does not thrive, the department structure has opened up for the possibility of transferring the child to another department, yet retaining the pupil within the same school district. This is beneficial from the perspective of the child who gets a fresh start, but also for the management, in that, these are able to retain the pupil within the larger district budget (I D.lin.419). For pupils with special needs similar actions can be taken as these in co-operation with their parents can be enrolled in another department if the services there are better suited to the particular needs. The department structure thus gives way for alternative solutions to emerge; solutions which are better suited to the children but which

also gives greater managerial flexibility. The question is however if competition in itself is understood as a predictor for quality and thus a competitive element. From the part of the schools this is especially questionable when it comes to the effect of competition among public schools, as voiced by the principal from District 1:

“The idea that we need to market ourselves raises a slight concern with me, because we don’t invent the service we’re expected to provide. The Law already dictates what we must give the children. Accordingly, the differences across schools can’t be so great – the service provided can’t be that different – where we can differ is on the entertainment values and that’s something which I don’t want to compete on” (I C lin.570ff.).

This is interesting in that the principal to some extent questions whether local actions are actually able to differentiate the service offered, or whether education is education and not something which can be affected by local initiatives and the staff. The other principal further stresses the importance of keeping in mind the broader picture when seeking to attract pupils, namely that of the general viability of the entire municipal school system:

”We don’t go about stealing many pupils from our colleagues, because we also need to remember that it’s not only a matter of how many pupils I can pinch. I also have to keep in mind that the public school system as a whole must be able to survive” (I F lin.278).

The district structure however means that prior patterns of attachment and co-operation is complicated by the fact that *“we so to speak became rivals, which makes the choice of day-care and geography – where you live and how easily you can get to the school – very important factors and as such it means that parents more frequently use their free choice”* (administrative coordinator District 1, I A lin.214). If the overall picture is not kept in mind, District 1’ principal argues, the increased competition may in the long-run become a factor affecting the otherwise good relationship between the different school services in the community: *Up until now we have lived in peaceful co-existence...accepting each other’s role, not slandering each other...yet, I can imagine, insofar that there are fewer pupils to ‘fight’ over, voices will be raised* (I C lin.554).

### 11.3. CLASS SIZES MATTER

Encouraging the management to think creatively and establish cost effective solutions is vital from the perspective of the municipal accounting department: *“we want them to innovate, [a deputy head explains] not just administrate”* (I G lin.561). Upholding high class size averages are in this context an important lever. The design of the funding model, the deputy head emphasizes, is here a vital for securing that high averages remain a continuous priority for the management:

“If you just give the funds precisely for a class, you would never be able to create an incentive for improvements, for amalgamation of classes, or for thinking across departments. They have learned this since we started the process in 2008. Back then, all sort of class sizes existed. Now they take class size into consideration” (I G.lin.533).

From 2009/10-2012/13, simultaneously with an 11 % drop (3762 to 3343) in the pupil population, the average class size rose from 18.6 to 20.5 (CSC 28.12.13 head 4). The decreasing pupil numbers has spurred along the need to use class sizes as an important control tool and according to the administrative coordinator of District 1 this involves a range of strategic considerations to be taken into account:

“I can already see [15<sup>th</sup> of August] that we might have 50-60 less pupils next school year, which means that we already now have to say: ‘so which strategic considerations must be taken, how is our class average, is it possible to merge classes or to cut one away entirely?’” (I A lin.59-60)

Forming viable classes is especially in focus in situations where natural transitions offer opportunities to re-amalgamate. For example at the start of school and when pupils reach 7<sup>th</sup> grade and are gathered in one department, as is the case in three of the districts. These transition points are favored as amalgamations here are not viewed as controversial by parents or children as they otherwise tend to be. Since the department structure has been in place for some years, parents and pupils are now aware of the pending change of school, which means that it no longer comes as a surprise. An important focus point thus becomes that of telling pupils in the town department that the existing classes will be re-formed when pupils from the other departments join in. The amalgamations are thus sought verbalized as a natural way of giving all pupils a fresh start. From the managerial point of view however it also constitutes a vital opportunity to establish efficient averages; similar to that when a new year-group begins pre-school. The department structure here enables a more holistic, cross-departmental approach to emerge, especially, District 2’ administrative coordinator explains, when the distance between departments is small:

“In the in-schooling we focus on whether we can move [a child], that is, what’s appropriate in relation to where the pupils live, do they have siblings, what are their wishes and so on? And then we trim it so that we at least reach 20 in the smaller department, while ensuring that we don’t surpass 28 in the other.” (I D lin.422ff)

At times however, the department structure can also act as a barrier because the distances are so big that moving pupils across departments is not possible:

“If at the beginning of the school year I see a class getting closer to 17-18 pupils, it’s a wakeup call; adjust class sizes...but sometimes the structure gets in the way. The small department has relative low averages. But I

can't do much, because I can't say to town-children; 'you have to go to school 15-20 km away in order to make the class size fit'" (I A: 168ff.).

The lower averages in the small departments put pressure on the management to create high averages in the other departments. From a budgetary perspective this is the only option available for preserving and upholding the quality of the smaller departments. Odd pupil numbers, District 1' administrative coordinator explains, may however complicate such efforts: *"My problem starts if I've two classes with 17, because I can't merge them, but I don't get enough funds for running both. Thus, optimization will often first take place when the pupils are gathered after 6<sup>th</sup> grade"* (I A.lin.179). In the interest of efficient resource utilization, class amalgamations may however also happen more unexpectedly, which may be problematic. Although new classes have been formed in the 7<sup>th</sup> grade, many pupils leave during the older grades, either to enroll in private or in lower-secondary-level boarding schools. This may affect class averages to such a degree that additional amalgamations are needed. Such unexpected amalgamations, the administrative coordinator 1 explains, are not easily conveyed, catalyzing often further dis-enrollments. In order to counter this, the parents and children must be involved through close dialogue with the hope that their confidence with the school management can be retained. Yet upholding high averages is the preferred method for securing an efficient use of resources:

"I say it's easy [to merge classes], but this is only when compared to the alternative. Because I'm fully aware that parents, children and teachers do not always agree with amalgamation of classes...I know all the arguments. But from my perspective and based on the allocation model, this is clearly the most gentle way to adjust" (I A lin.184ff.).

Educational and pedagogical concerns can however weigh so heavy that amalgamations will not be carried out despite low averages. If for example, the coordinator of District 2 explains, a department head comes-up with sound pedagogical reasons for why two classes should not be amalgamated is taken into account, but:

"...then you co-teach in some subjects, and use additional group-divisions in others. It might cost something money-wise. But if it's the right educational choice, then we will support it. But they [the department heads] must also have an idea about where to find additional funds, e.g. through co-teaching in other classes, thus bringing something to the table so to say. So they have to do their homework" (I D lin.243ff.).

#### 11.4. ACTING IN A POLITICALLY INFLUENCED ENVIRONMENT

A basic condition for the local management is that they are acting in an environment where political decisions influence the local decision-making scope; for example, the introduction of district management in combination with the demand to uphold

local services in the in-schooling in all departments. District management has further affected local practices, in particular the local approaches taken to ensure efficient resource utilization. In being responsible for multiple departments, the management now distributes funds across not only line-items but also departments, implying the need to consider and handle the fact that these have varying enrollment levels and abilities to become financial viable on their own. In order to uphold academic standards in all departments, the management teams have chosen to allocate a larger part of the budget (than otherwise indicated) to departments with lower enrollments. As the next quotations indicate this is perceived as the only viable way to ensure that education standards are also upheld here:

“We’re one organization. Our small department doesn’t always have enough pupils to be self-financing. Thus, my focus has been: ‘well this department must have a budget that ensures that all have the same service level’...thus, the smaller department get a relative larger share” (Principal, District 2, I F.lin.161ff).

“As long as we have this structure, all children must be given a sound starting point - in principle the same - thereby not implying that funds must be equally shared, because they aren’t. Even the weakest link must be able to run the school properly; also in a pedagogical sense. We don’t have 1<sup>st</sup> and 2<sup>nd</sup> rate departments” (principal District 1, I C.lin.190ff)

The decision to ‘subsidize’ the smaller departments is not always easy to convey to the employees at the bigger departments. In their eyes the budget is not always fairly distributed, making the bigger department suffer as a consequence. In District 1 the administrative coordinator notes, they have focused very much on building a strong unified culture to ensure that all departments are viewed as parts of a unified organization. Without such a culture, the coordinator argues, it is very difficult to convey the need and appropriateness of extra funding being used at the smaller departments, further stressing: *“Dissatisfaction is starting to arise with our employees in regards to how much money we spend on running our smaller rural department, compared to here, and I have been forced to talk about solidarity. We’re one school and should be seen as such”* (I A lin.333-34). Varying department sizes, the sector head concurs, do put pressure on some districts:

“We’ve gone from seven municipalities, with very small production units, to one big. But we’re still operating with the smaller units and can’t borrow money so to get rid of these inefficient units and instead build bigger more effective ones – this is to a great extent our Achilles’ heel. We know our efficiency isn’t the best, when it comes to our public schools. We blow a fortune on bad, inefficient capacity...so to some extent it’s the politicians who set the limits for how efficient we can be and how good the quality of service can become” (I G lin.359).

The increasing budgetary strains brought upon the management by the smaller departments, are a growing cause for local concern. In some sense the feeling is that the effect of the political decision to maintain local services has been devolved, that it has been placed at the school level. In the words of the management, they must ensure budget compliance and education-related goals within a politically determined frame. Politicians, the administrative coordinator of District 2 notes, thus play an important role in setting the overall frame, in that, these in the end affect the ability of the management to ensure efficient resource utilization. Political courage in terms of carrying out controversial school closures is needed in order to ensure a continuous proper academic quality. A downside of this is that electoral concerns at times can postpone such decision, affecting heavily the general system:

“Next year is election year so certain decisions aren’t made, although it’s apparent that some departments are not financially viable, in fact maybe not even educationally viable...as a municipality facing financial problems I think we should be proactive, and the politicians ort to look at it, because it shouldn’t be at the expense of the pupils. Mrs. Jensen might think it’s nice to have a school around the corner, but if you instead get better school conditions, this is to be preferred.” (I D lin.594ff9)

Another political decision affecting local practices is the decision to allow only 10% carry-overs. As described three schools accumulate modest surpluses and for them the ability to carry forward surpluses is a valuable managerial tool for ensuring a predictable level of service. District 2 however is at times able to accumulate surpluses which reach the upper limit, and here the decision is a cause for frustration, as explained by the administrative coordinator of District 2. Larger investments or extensive renovations are often complicated; at times made practically impossible by the need for political decisions on the matter. This creates a perception that the districts are treated differently and unfairly:

“We have a good grip on our school and are generating surpluses. We all get the same for running the schools. The other schools spend all their money, which can make us a little...you know jealous...Now because we have money, a discrepancy arises...because we’ll not get a share of the extra funds for IT, which we don’t think is fair. So our incentive is, ‘we have a lot of things we want to get done, so we’ll start implementing, and then we’re down to the 2 million’...we don’t want to punish our employees for being spartan” (I D:91ff).

Finally, with district management the budgeting practices are further slowly changing, with more people being involved. This, the principal of District 2 explains, entails involving the department heads in setting the budget of the particular department: “*I want the department head to say: “If I have to run department X with the service level you have prescribed, then I need this level of funding”*. Further arguing:



“You can say we’re beginning to move towards a negotiation, within the school where people can come and argue for how much is required to run the department. This transition is new and difficult as they have been used to me setting the budgets quite precisely – you get this many hours and this norm – now we’ve moved a step further and kind of turned it around” (I F lin.176ff.).

As a result, District 2’ administrative coordinator explains, department heads are becoming more aware of the cost of for examples substitutes. Aware that savings here is a way of increasing the funds available for buying for example teaching materials (I D lin.210). Being an involved part of the process is positive, although a district head describes how matters such as teacher’s salaries and norms, at times can be a cause for concern. As the salary makes up the substantial part of the budget, setting the correct norms becomes an important challenge: *“if the salaries overrun with 2%, then we aren’t able to manage the other items, because there is in principle no funds left”*. This, he explains, leaves him with a dilemma:

“If for education-related reasons we’ve agreed to hire more people, or if we due to the norms for the teachers end-up with ‘half’ a teacher too much, the 250,000 connected to this, means that I’ll exceed my budget. The other items are so relative small that I’ll not be able to find the 250,000 there. So if I’m expected to run the school on the level intended by the model, my budget will be overrun” (I E lin.432ff).

Accordingly, the department head explains, this affects how he himself orchestrates his own budgeting process, especially which decisions are to be further devolved to the teachers. The new working agreement for example entails enhanced teamwork and places the responsibility for planning the school year with the teams. Simultaneously, in order to control spending, the budgeting process is changing:

“Four times a year they [the teachers] can hand in requests to me. It used to be so that each Subject Committee had its own funds. But the ‘zones’ simply became so small that it didn’t make sense. It could not be managed probably – funds were so devolved that the needed overview did not exist – so in order to manage probably and spend resources where they are most needed I had to pull funds back up a level” (I E lin.254ff).

## **11.5. CREATING INCLUSION – A PEDAGOGICAL AND MOTIVATIONAL CHALLENGE**

The pursuit of inclusion is at the top of the local agenda. Successful inclusion, however, is a complicated challenge, which if not managed properly can become a vast cause for concern and frustration. Inclusion, the principal from District 1 notes, not

only affects the general teaching environment and the teachers but in fact the entire public school system:

“Inclusion isn’t only related to pupils with special needs or to those misbehaving or having difficulties in keeping up with the teaching. It’s also relevant for the talented pupils. It entails including a wide range of pupils. It causes difficulties for the teachers and requires reflections over one’s own practice – changing it so that the needs of the individual child are taken into account. This you can say is a clash with the old saying ‘one teacher, one class, one subject, one class room’, where you could close the door and nobody cared what was going on” (I C 341ff.).

The devolvement of special needs education funds, the administrative coordinator of District 1 argues, has created a better basis for inclusion to take place. Not only has it enabled the establishment of more inclusive services tailored to the needs of the pupils. It has also given way for a more flexible and efficient use of resources:

“We can act more quickly to the benefit of the child, parents and class; Creating interaction, because this is not a static situation. Needing help sometimes doesn’t necessarily mean that the child needs help all the time. In some periods yes and then they should come back to the mainstream environment and group. Because I totally agree that the public school is for everyone, and we must be able to include more than we’re actually are. But I’m also of the opinion that no single child must take away so much time that it will be at the expense of the other 20 pupils. In such cases you have to act, and it’s this ability to act, which in my opinion can be done more promptly and effectively now that we have been given the budgetary responsibility” (I A lin. 482ff.)

With the legislative change, the prior link between funds, the specific child and diagnoses has been removed. This, Districts 2’ administrative coordinator argues, ensures prompt action, something which in the long-run is very beneficial:

“Prompt action is a contributing factor for securing that a child in the long-run will not become too demanding and we can spot them immediately. Instead of sitting around waiting a year for the funds, we wanted them devolved, to be used as we see fit. And now this is so” (I D.lin:49)

The general opinion is that the devolvement of funds has brought about a more flexible use of resources. This is manifested in the fact that the funds are increasingly tied to the larger group around the child, instead of the specific child. This new approach, it is argued, is not only more flexible, but also more resource efficient, in that, it reduces the likelihood for support being upheld beyond actual need. The specific approach taken towards creating inclusive services differs across the districts. Some districts have established specific class tracks, in one of which the pu-

pils with special needs are included and to which teachers with special pedagogical knowledge and skills are assigned (I H lin.43ff, deputy head). Other districts have attached extra teachers with special pedagogical competence to specific groups of children in the in-schooling classes. This, it is argued, ensures the flexibility needed for meeting the needs of the more diverse group of children. In District 2, a department head explains, they have organized their in-schooling so that they break-up the classes from 1<sup>st</sup> – 4<sup>th</sup> grade, teaching instead the pupils in groups based on their academic capabilities (I F lin.337ff.). Similar efforts are taken in District 1 for the older pupils. These pupils, the principal explains, possess a strong desire to be and stay a part of the general environment and in order to secure this, pupils are divided into groups based on their academic capabilities in the three compulsory subjects, Danish, Math and English, with an extra teacher with the specific professional capabilities assigned to each group (I C lin.456ff.).

Ensuring that pupils with special needs, also leave the school with a final examination is a vital aim of inclusion, a deputy head from the administration notes:

“We’ve had to communicate the fact that when these pupils turn 18 and come in contact with the labor market, they need their final examination; because if they don’t get it, then it’s the Employment Sector which must pay. The funds might come from another sector, but it’s still [Municipality A]. They have been 9 years with you – thus make sure they have their final examination, also even if they might end up with only 0 or 2. They need it – so it’s about not shutting oneself off but instead being aware of what is next to come” (I H lin.844ff.)

Albeit, inclusion is a top priority for both the administration and the local management, the general notion is that inclusion does not imply that all pupils can or must be included in the general environment. Inclusion efforts can indeed pose a challenge, especially for the teachers who now have to teach a broader and more diverse group of children. If this is not probably addressed by the management these new conditions can affect the motivation and well-being of the teachers. Preparing the teachers has accordingly become a vital concern for the administration, a sector head explains:

“When I mention the teachers, it’s because it’s a persistent and national issue; that discussions on inclusion often bring about debates on whether the terms and conditions under which the teachers have to work are reasonable. We’re aware of this and keep a close eye on it, including it in our training programs” (I H lin.651ff.).

Extensive training programs for all employees have been organized, in order to give the teachers and pedagogues a broad foundation to work on. Some teachers have received additional education, given them new skills in mathematics or for teaching pupils with reading difficulties. While others have been trained to become AKT-

councilors (an abbreviation for behavior, contact and well-being) enabling them to handle pupils with socially or emotionally conditioned difficulties. ‘Resource Centers’ have further been established in each department; centers which are intended to work as knowledge and support hubs, where additional help can be acquired when needed. Albeit such efforts are to better prepare the teachers to meet the changing needs of the pupils some are still left with frustrations. As a consequence the working environment can at times be very affected. Changing practices do not happen overnight and inclusion, the principal of District 2 stresses, thus remains a challenge for both the teachers and the management:

“It means that the teachers to some extent have been forced to look in the mirror, evaluating as a team: what are we doing and why do we end up where we do? Is there something we can do in order to be preventive? This is important aspects of inclusion – moving away from ‘if only we ‘get rid’ of little Peter everything will be okay and we’ll be able to handle it’ – because we’re not okay, two others will just pop-up, that’s how it is” (I F lin.407ff.).

Despite the general agreement that the devolvement of funds has provided a better foundation for the management to meet the vision of inclusion, the principal from District 1 further raises the concern, that despite all the efforts taken the challenges faced by the public schools might be of a kind which cannot be met entirely by the allocation model: *“The biggest challenge for the public school today is, in my opinion, disruptions in the class room. It’s simply too difficult for the teachers to get on with the teaching – and these behavioral difficulties aren’t something which by themselves triggers extra resources”* (I C lin.378).

## 11.6. BECOMING ‘PEDAGOGICAL MERCHANTS’

The intention of the funding model is to establish a clear connection between referrals and budgetary responsibility. Clear budgetary incentives, the principal of District 2 argues, have in this context been created. Incentives which in his eyes are a part of a broader municipal attempt towards controlling spending across sectors:

“Prior to the change we only lost the pupil-dependent allotment, when moving a child [to a segregated special needs service], but that was all. Now we have a financial incentive, not only losing the allotment but we also have to pay...this is of course done in order to integrate more children, and with that also making it easier to control spending” (I E:49ff).

The devolvement of funds, the deputy head from the School Sector explains, is not to be understood as a saving exercise *per se*. However, by devolving responsibilities the hope is that the efficiency by which resources are used will be enhanced because the management will be able to tailor services more precisely to the needs of pupils:

“I expect they will establish ‘medium’ options, that is, a little more support than before. They have the funds to do something extra for those who need something more specialized. That’s the whole idea. We’ll not take money from them, and they’ll not get any more. So they have to work with what they are given, and we hope we’ll not get too many complaints” (I H.lin.377ff.).

Discussing the effects of the changes in relation to pupils with less severe problems, the deputy head further notes: *“from now on, there is no need to refer them to special education, because they’ve the money to make the needed offers”* (I H.lin.342). The hope is thus that prior temptations to up-code pupils to group-integrated services, as a mean to accumulating a larger budgetary base, will be removed. Albeit, not being seen as a saving exercise, the budgetary aspect must however not be forgotten, the deputy head continues. Focusing on the quality of education should consequently not be seen purely as a mean to secure sound academic results, but more holistically also as a way to accumulate a larger budget base: *“I like to use the term ‘pedagogical merchant’ – that is what a principal must be – you have to focus on the education [faglige pædagogiske], but you must also be a merchant”* (I H: 466-447).

The management should accordingly view their services as something on which they can make money. The service quality must, in other words, be so good that other schools are interested in buying these services. This duality, the administrative coordinator of District 1 explains, is very present. At the one hand, they are aware of developing a strong quality of service, at the same time however they increasingly become aware of the rising pressure to use services provided by other schools:

“We have to develop our areas of competence, so that, we’re actually making money on the model. Understanding, that we actually possess specific competences which can be used to make offers to other schools in need of such services. Creating a balance, where I don’t buy more services outside the school, than I’m taking in. Securing that the second I buy services, then I need to adjust our norms – our staff... We need to be able to generate a surplus while withstanding the increased pressure to segregate pupils, which will definitely arise” (I A.lin.136ff.).

However, the financial incentives created in connection with inclusion, raises concerns with District 2’ principal, who fears a situation where budgetary incentives carry so much weight that educational concerns are compromised:

“I can see some pedagogical concerns arise: A pupil might from time to time need to be segregated from his class, but some schools might say ‘we’re simply not able to afford this, so we’ll create an offer at our school instead’. Such a service might not be of the same quality, lacking the knowledge and competences needed compared to a special needs school” (I E.lin.55ff.).

Although similar concerns are expressed in other management teams, it is especially pronounced with the management responsible for the special needs schools. A new practice in this field, the principal stresses, can potentially constitute a ticking time bomb under the budgetary base of his entire district: *“It’s suddenly four schools who are responsible for the visitation and I can potentially find myself in a situation where it’s only children from our district who use the school, which means I lose 60 % of my budget base (I F lin.582ff).* Similar, the administrative coordinator notes:

“If the children get the same services at their own school, with it reducing the time they’ve to spend on transportation, then the idea is good. You just have to make sure, when bringing back these pupils that you’re able to provide the services they need. We fear that a bit... We think our services are really good for these pupils, so hopefully the other schools will buy them. But to what extent we don’t know. It can potentially be a challenge for us and we risk going from 50 to 17 pupils. This will transform the structure of the entire department” (I D.lin.360ff.).

A fear that budgetary incentives will supersede educational concerns when deciding where a pupil should receive its education, thus exist. That is, that the other schools are incentivized to accumulate the largest possible budget base by taking back pupil with special needs. From the perspective of administration however, budgetary concerns may never outweigh educational based concerns. Rather, it is argued, a correct balance between budgetary and education-related concerns must be created. Accordingly, although budgetary concerns, as a financial department manager states, are important, they must never become the overriding concern governing the schools: *“In principle they need to get as much as possible out of their funds, but they must still abide by the law, still evaluate and report to us. They have been given the funds, but they must still account for its use (I G.lin.493-494).*

Being in a state of transition, the boundaries, he argues, are being tested. In this process local services are improving, but situations have also occurred where some have been tempted to refer pupils to services with the financial responsibility held by the administration. In order to avoid this, the deputy head stresses, a firm eye is kept on such developments:

“...you never know if we choose to devolve the rest of the budget [not the budget for the second special schools, but for some of the pupils currently funded centrally], when they have gotten used to this model, they will maybe be able to include some of these also” (I G lin.502ff).

## 11.7. CONCLUSION: PRACTICE AND POLITICAL OBJECTIVES

The account given in the above sections has tried to capture how school management is practiced in Municipality A. Visualizing how educational and budgetary

concerns are balanced against each other, creating a potential tension between the two, when managerial decisions are made. A basis assumption of formula funding is that funds should be distributed in-line with the political objectives of the service area. The incentive structures should, in other words, encourage providers to act towards accomplishing the politically set objects, avoiding behavior hampering such achievements. To study this, the chapter will conclude by comparing the actual practice with the political objectives presented in Chapter 9 and the actual accomplishment of these as presented in the municipality's Quality Report for the school year 2012/13.

The tension between budgetary and education-related concerns is inherently present in the political objectives, which revolve around the academic levels of pupils, the skills of teachers, the inclusiveness of the public school and creating strong co-operations with the parents ensuring the well-being of the pupils. While at the same time, stressing the importance of ensuring a cost-effective delivery of services. The actual position of the formula funding model in the lower left quadrant of Figure 10.3 indicates that incentive for quality and efficiency improvements are expected to stem mainly from the relative/modest competitive pressure to which the schools are subjected to. Whereas the low level of budgetary risk by itself brings forward few incentives in this context.

Based on the account it is clear that the main lever for ensuring these goals is the devolvement of funds. Through the wider decision-making scope the intention is to increase flexibility, the quality of education and with it the likelihood that service delivery will be carried out as cost-effectively as possible. The budget, so to speak, is not intended to act as a straight jacket on management actions, but rather an enabling tool, encouraging the management to use their local knowledge so that both budgetary and education-related objectives are met. In other words, few elements in the model tie together directly financial incentives and specific objectives. Rather, objectives are sought achieved by enhancing the local autonomy, combining it with the consequences of competition and that of being held accountable through for example publishing results and monitoring of performance in general.

One exception is however the quest for inclusion, in that, the model contains direct incentives for inclusive efforts to be taken. The capitation payment approach used to allocate special educational funds removes the link between local decisions on needs and the subsequent size of funding and brings forward incentives for 'prevention' and cost control. Diagnoses of needs are now no longer a precondition for help to be established for pupils with less severe needs. The distribution of risk, in this context, gives the management a clear incentive to include pupils in local services, in that, such efforts will keep funds within the district budget to be spent at the full discretion of the management. Such undertakings are as discussed subjected to the danger that needed services will not be established in order to cope with the budgetary risk of having to meet all fluctuations in needs within the fixed budget; also although the

overall budgetary risk is low. As also case payments are used the danger of up-coding is present.

The account highlights how inclusion is a top priority with the management, albeit it at times can be a vast challenge both teachers and children. Textbox 11.1 containing results from the municipality's Quality Reports shows that only one of the six related objectives for the school year 2012/13 was met, namely that of orchestrating the educational services and efforts so that the number of pupils in the general environment increases (CSC 18.12.13, head 4)<sup>14</sup>. As for the rest only partial fulfillment is attained.

**1 out of 6 performance targets have been fully fulfilled**

The only performance target which is fully accomplished is that of orchestrating the educational services and efforts so that number of pupils in the general environment increases. The targets on a bringing down of the proportion of pupils in special needs classes and schools (percentagewise), IT, exercise and pupil satisfaction and absenteeism are only partly met.

- *Textbox 11.1 Actual fulfillment of the objectives on inclusion & wellbeing, Quality Report, school year 2012/13*

The lack of accomplishment can be attributed to a range of factors. The account reveals that inclusion represents both an educational as well as a budgetary challenge for the schools. Not only must the services be tailored and adapted to the needs of the pupils, but from the teacher's perspective inclusion constitute a challenge which if not handled properly may affect their motivation and ability to handle and teach a potentially very diverse group of children. This, the account showed, could bring forward an increased pressure to refer pupils to more comprehensive services. The code of ethics may here also play a role in that it indirectly turn a (re)inclusion of pupils with special needs into a matter of ethics. Thus, although the model brought forward strong incentives for the emerging of a more inclusive approach, other factors, including for example the low budgetary risk, may here come into play, in the actual practice of school management.

Regarding the goals for better academic results the model gives no direct incentives for such improvements to come about, the allocation of funds being at the outset independent of academic results. Instead such a focus is to be brought forward by a long-term demand side concern stemming from the relative/modest competitive

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<sup>14</sup> The content of Textbox 11.1-11.3 comes from the 2012/13' Quality Report and the results are a general reflection of the accomplished levels of the four districts as a whole. In order for a target to be deemed fulfilled at least three of the four districts must have fully fulfilled the specific performance target (CSC 18.12.13, head 4).



pressure. Where free choice combined with publications of results will induce the individual management team to focus on the academic results of their pupils as a mean to ensure high levels of enrollments. The actual fulfillment of the related targets is summarized in Textbox 11.2. Here it is seen that the reading abilities of the pupils have been improved to such an extent that the objective has been fulfilled. This is also the case for examinations results and the deeming ready of children for schooling. The last three targets are however only partly fulfilled. Importantly the objective on 'readiness for further education' is only partly met. This is interesting as this is verbalized to be a cornerstone of the public school system. It is further interesting that the 'examinations score of pupils with special needs' is also only partly fulfilled, suggesting that despite efforts from the administration, this area still lacks results. As such, although the model gives no direct incentives for academic improvements the results suggest that the competitive pressure may play a crucial role in upholding such a focus.

**4 out of 7 performance targets have been fulfilled.**

The targets on reading for both native and bi-lingual pupils have been accomplished. This is also the case for targets relating to 'school readiness' and the examination results for the ordinary pupils.

The last three targets: 'Readiness for further education', 'grade averages' and the 'examination targets for special needs pupils' and are only partly fulfilled.

- *Textbox 11.2 Actual fulfillment of the objectives on academic level of the pupils, Quality Report school year 2012/13*

Improvements in pupil performance are from the perspective of the schools and the administration closely linked to the capabilities and skills of the teachers, as well as to the establishment of a close co-operation with the parents<sup>15</sup>. The account showed how the focus on parents has become a vital lever for ensuring that children remain in the public school. A requisition for high education quality was verbalized as the possibility of securing teachers to practice only in their main subjects and to pupils of the age-group. Textbox 11.3 shows that the teacher's competences are generally improving, although not all teachers are yet teaching in their main subjects. As highlighted by the account the introduction of district management has been especially fruitful in this context. Finally, although the use of substitutes is decreasing, the aim concerning average time of actual teaching conducted by the teachers is still only partly fulfilled.

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<sup>15</sup> While the parental satisfaction target has been accomplished the other two targets (parental use of intra and the development of local principles in line the municipalities 'coherent children & youth' policy) have only been partly fulfilled (CSC 18.12.13, head 4).

**2 out of 4 targets has been accomplished**

The targets on 'teacher qualifications' and 'proportion of lessons taught by permanent staff' have been fully accomplished.

The targets on 'pupils being taught by teachers with subject specific competences' and that of '36 % of the gross working hours of the teachers being made up by actual teaching' are only partly fulfilled.

- *Textbox 11.3 Actual fulfillment of the objectives on teacher' qualifications & cost-effectiveness, school year 2012/13*

Some of the latter objectives are closely related to the local understanding of cost-effectiveness in school management. Which according to the account is pursued through different means, including the establishment of viable class sizes, seeking out economics of scale and retaining high enrollment numbers. Especially the latter, due not at least to the size of the payment attached to enrollment and the decrease birthrate/pupil numbers. The account yet showed that this incentive is not as strong at the department/teacher level as the distribution of funds across departments is based on managerial discretion and not necessarily on the actual distribution of pupils. High class averages was deemed especially preferable by the management as this gives way for an increased decision-making freedom over how extra funds are to be spent. Despite this, the account also showed how education-related concerns at times amend such quests; this required in turn other cost-saving suggestions to be proposed. Finally the district structure was seen as both as a barrier and a mean to ensure high averages.

All in all, the formula funding model of Municipality A seeks to affect behavior through a combination of devolvement of funds, specific goal setting, accountability for results and specific direct financial incentives. The actual level of fulfillments show that there is still some way to go, especially in terms of ensuring efficient use of resources. The low level of budgetary risk placed upon the district gives few incentives for efficiency to emerge. Not only is the municipality at risk of paying for the same pupil twice, but the earliness by which the spending frame is made final further means that proper incentives are not being instilled with the management. Concerning inclusion the incentive structures attached to the payment type may become deluded and impeded by the ethical code and potential attempts to up-code. Moreover it may happen that funds intended for inclusive-seeking services instead are used in local special needs classes, which albeit being locally placed are still segregated services. As discussed, this may cast doubt about whether the quest for inclusion is possibly more fictive than real. Finally, the ability and tendency of the private providers to enter into cream-skimming behavior may if the increased inclusiveness is not handled probably, further affect the ability of the schools to compete over all types of pupils.

The presented account is very much an up-to-the minute-account influenced by the actual shape of the model at the time of data collection. The funding model of Municipality A is undergoing continuous changes, especially when it comes to the division of responsibilities for special needs education. This includes removing some of the cost sharing arrangements. The administration is now only holding the budgetary responsibility for the second special needs school catering to pupils with very severe special needs. Thus, from being responsible for 75 % of all special needs funds, an even larger part is now devolved to the districts (CSC 16.01.14, head 5).

For the school year 2013/14 this means that each district will be allowed to establish a local special needs class in the older grades. That is, each district is given a fixed amount enabling them to establish a special needs class in the in-schooling, middle-school forms as well as a special needs class for 12 pupils in the older grades. In addition to six externally provided 'seats' this in total corresponds to resources for 30 'seats' in local, decentralized special needs classes (CSC 07.02.13, head 5; 03.04.14, head 4).

For the school year 2014/15 the municipality further contemplated incorporating a socio-demographic aspect into the allocation of resources for inclusive enhancing services and special needs education. Thus, countering the concerns that funds are not being distributed fairly in terms actual needs. However, a consultant report on the socio-demographic distribution across districts concluded that no major differences in needs across districts existed. In fact it was argued, a more equal distribution of needs has rarely been seen (30.10.14, head7).



## Part IV Municipality B

**Part IV** contains the second field study of the dissertation. The subject of study is Municipality B, a municipality founded following the structural reform in 2007 through the amalgamation of two previous independent municipalities. Large budget overruns in 2008 in connection with especially special needs education fueled the start of a multiannual development program (CC 02.09.08) aiming at tying together educational quality, decision-making competences and budgetary responsibility. In this context, the funding model was seen as a vital lever for success, since the prior model, it was argued (CC 06.10.09, head 106), not only limited the decision-making scope of the management, thereby hampering their ability to take on responsibility for alternative, local solutions, it also – *“hindered the development of services and quality, and the shared responsibility meant that schools relative freely could recommend pupils for special needs education, which at the time were funded from a large shared pool of funds”* (CC 02.09.08, head 91). With the subsequent changes Municipality B became one of the first in a Danish municipal context to devolve the budgetary authorization for a comprehensive part of the special needs budget to the individual school districts. An important precondition is here, a municipality manager notes, that budget control on its own is insufficient:

“It’s important to have a sound funding model and through that a good grip on the budgetary part of it. But the allocation part of the model can never stand alone, it must be buttressed by ways of organization supporting the funding – I actually think this has been our luck – we’ve had more than just one string – our principle for financial control – but also continuously talking about organizational control models including a range of municipal services, the development of local resource centers, and a central coordinating function evolving around the co-operation between PPR, the Referral Committee, the local organizations and us as the commissioner (I N lin.115ff.).

In 2011-12 similar arguments revolving around quality and decision-making capabilities were used as motivations for changes of the funding model for general education. A new approach which further aimed at connecting local budgetary responsibility and decision-making giving the local management an educational and budgetary motivation for retaining and attracting pupils and for orchestrating the service delivery in a more flexible manner, was hereafter introduced (22.11.11, head 103). The model, a financial employee notes, had to be pupil dependent:

“From a model which protected smaller units, securing a level of safety when establishing a class, schools are now of a size making them capable of prioritizing – do we want to make an exemption request for a class consisting of 32 pupils, or do we instead allocate a larger proportion of

the total school budget for financing 2 classes with 16 pupils? In other words, it's up to the schools to find the best solution". (I O.lin.50ff)

Following the initial changes to the funding of special needs education the municipality has experienced an increased pressure and movement towards the externally supplied special needs services, where the financial responsibility is held by the administration. This pressure, a municipal manager argues, has necessitated a further devolvement of funds and responsibilities to the school level:

"We're seeing a pattern where pupils who were previously enrolled in local special needs services are being referred to external, more segregated services. We need to put a break on this. This is why we're speeding up the process of creating the next model generation" (I N.lin.306-09)

The data used to construct the following account is collected prior to this last change and its accompanying devolvement of responsibilities. The account thus takes as its point of departure the state of conditions of Autumn 2012.

Taking on the same form as *Part III*, **Part IV** consists of three chapters. **Chapter 12** analyzes the technical components making up Municipality B' formula funding model, including a description of the political objectives of the school system and a thorough analysis of the control components included in the formula funding model. The analysis is again driven by the theoretical framework from Chapter 5 concerning the proposed *package of control* albeit the content is also influenced by the actual findings thus bringing life to the intentions behind the funding model.

Building on this **Chapter 13** studies the funding model in the light of the framework developed in Chapter 7. The type of budgetary risk and competition imposed onto the districts by the funding model is identified and the position of the funding model in the rectangle of Figure 7.4 is determined. Hereafter the inherent incentive structures of the model are discussed, thereby enabling a description of the theoretical practice created by the model.

In the final chapter of **Part IV**, **Chapter 14**, the study moves away from the theoretical implications analyzing instead the actual managerial practice. The chapter accordingly presents an account of how school management is actually practiced in Municipality B. Again, the account focuses on the guiding principles affecting the local management in their daily practices trying to visualize how education concerns are weighted against the inherent incentive structures of the model. Finally the chapter compares the the managerial practice created against the fulfillment of the organizational objectives, in this way highlighting whether the practice created is in line with these objectives.

## CHAPTER 12. FUNDING MODEL, MUNICIPALITY B

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### 12.1. INTRODUCTION – STRUCTURE OF THE SCHOOL SYSTEM

As a part of the process leading up to the change in funding in 2012 a report studying the general effectiveness of the school system projected that a steep declining birthrate, in combination with an inefficient school system structure, would negatively affect the service delivery. Structural changes, it was stressed, were needed (CC 01.03.2011, head 16). All political parties agreed on that closing down local school services was not an option (Town Council 20.06.11, head 74). Instead the structural changes were, as presented in the agenda to a ‘*Children’s Committee*’ meeting held the 31.05.2011 (CC 31.05.11, head 49), to be characterized by:

- Improved resource utilization; to the benefit of all pupils. A sustainable financial model which ensures the greatest level of resources possible is spent on teaching.
- The preservation of schools in the smaller urban communities. Sound and safe local school services for pupils in their first years of schooling.
- Educational and social attractive environments for the older pupils and their teachers. Based on the abilities and interests of the pupils the options available should be increased; Sound and exciting youth environment in the bigger towns.

With the new structure the eight original public school districts were merged into five (Town Council 20.06.11, head 74). District management thus emerged, with all but one district having more than one department (respectively 1, 3, 2, 2 and 2). In order to adhere to the political consensus concerning local services for especially the younger children it was decided that the departments in the smaller communities were to offer schooling for children attending preschool to 6<sup>th</sup> grade. Hereafter all pupils are gathered in the town-departments. The smaller departments, so to say, were to function as supplier schools (CC 31.05.11, head 49) and, in the words of the municipal manager, the intention of this was to “*turn around the narrative – from having lost a school to instead having gained a coherent “Children’s Village” for children in the age of 0-12 years*” (I N lin.462-63).

Due to historical circumstances very specialized special needs services such as special needs schools are not available in Municipality B. In order to abide by the law, ensuring that the needs of the pupil are properly addressed, the municipality has therefore formed partnership-agreements with the adjoining municipalities where such special needs schools are available. Special needs classes and group-services are accordingly the only form of segregated special needs services available in Municipality B. These services are, based on the idea of “*having the local special needs services evolving into municipal centers of competence*” gathered and grouped at specific departments, depending on their intended purposes (CC 10.01.12, head 8).

At the school level the structural changes meant that the management teams came to consist of a principal of school, a head of afterschool care and in districts with multiple departments' local department heads. The political oversight in Municipality B is held by the '*Children's Committee*' which, in co-operation with the *Finance Committee*, is responsible for developing and formulating proposals to the *Municipal Board*. Finally, the '*Center for Children & Youth*' constitutes the administrative entity responsible for overseeing all matters concerning children of the age 0-18.

## 12.2. OBJECTIVES OF THE EDUCATIONAL SECTOR

An important political focus point is the creation of a comprehensive, integrated approach across the 'Children and Youth sector', which not only removes 'barriers of transition' throughout the general education environment, but also supports pupils with special needs. Building on the premise that the schools are different and enjoying a great extent of local decision-making freedom, yet working within the political set frame, three main objectives for the school system are expressed in the Municipality's "Unified School Strategy 2011 – 2015" (Town Council 28.03.11, head 38):

- Grounded in the local community, the educational, personal and all-round development of all pupils must be secured in order to improve the overall education results
- In order to fulfill the national objective that 95 % of all pupils complete further education, the youth must be given the best social, all-round and educational qualifications, enabling them to complete further education
- Long-term political decisions on school structure and education must ensure an efficient use of resource fulfilling the core purpose of the public schools.

- *Textbox 12.1 Political objectives for the school system 2011-2015, Municipality B*

In this context five themes are identified as crucial for the development of a broad, coherent approach, namely 'Educational Competences', 'Digitalization', 'Inclusion', 'Learning' and 'Competences and Collaboration'. For each theme specific initiatives are outlined (Town Council 28.03.11, head 38). Due to the political presumption that the schools are different, each initiative is not applicable to all schools. The specific focus is rather to be found through dialogues between the management and the administration.

### Initiatives – Educational Competences

Specify and goal-set efforts which secures children's all-round development and participation in the community. Develop different teaching methods (e.g. 'learning styles', differentiated learning and group work) which take into account children's' learning styles and competences, including focus on children with special needs

Establish sound, professional settings and structures which enable educational discussions. National



testing for example can be starting points for discussions on education and pedagogical matters

### **Initiatives – Inclusion**

A broad municipal strategy for inclusion must be developed, so that, local learning environments are created which enable the inclusion of as many pupils as possible in the general environment.

These environments can include local ‘centers of competences’, opportunities for collegiate sparring and pedagogical guidance, networking across schools and further development of an inclusive pedagogy with focuses on the relational competences and well-being of the pupils.

The quality of special needs services for pupils who cannot profit from being included in the general environment must be improved.

The funding of special needs education must be changed, so that, it supports efficient and flexible resource utilization across the areas of general and special needs education, transferring resources from the special to the general environment.

### **Initiatives – Digitalization**

Establish and upgrade the technical requirement for digitally supported teaching, e.g. wireless connections in schools. Allow and make possible pupils to bring along and use their own laptops and upgrade and establish up-to-date library systems supporting the learning environments. Improve the employee’ competences in the practical use of digital media and the ‘new technology’.

### **Initiatives – Learning**

Develop the ‘start of school’ by taking as starting point the individual child’s motivation for learning. E.g. through the introduction of ‘rolling school start’, cross functional teamwork between teachers, the kindergarten heads and pedagogues and the use of teaching assistants.

Develop learning processes and group-work across classes and grade levels, e.g. through coordinated in-schooling and reading initiatives. Develop ‘flexible planning’ for the entire schooling, introduce if possible a model for ‘flexible vacations’.

Develop the ties between teaching and afterschool services, through for example, longer days of school, integration of play and learning. All in all enhancing the possibilities for creating better social relations and individual power of concentration across age groups.

Improve the organizational, educational and pedagogical content of the teaching in the older grades. For example through the establishment of customized ‘educational tracks’ or profiles in each district (e.g. sport, science or internationalization), and by creating individually orchestrated learning processes or groupings based on capabilities or subjects.

### **Initiatives – Competences and Collaboration**

Initiate a process where certain ‘resource personnel’ is educated in specific subject areas (e.g. the use of digital media) with the purpose of creating knowledge-sharing and sparring. Develop the teacher’s competences in ‘relations’ and as a ‘community leader’. Develop the coupling between research and local teaching, e.g. through the conducting of research-based teaching by for example co-operating with a college of higher education.

Develop management information and evaluation tools, so that, the evaluations of the school principals are based on educational results, the well-being of pupils and teachers and the level of parental satisfaction. Improving the dialogue between the management teams and the administration over results, viewed in the light of local explanations and possible initiatives for improvement.

Develop a partnership between parents and the school building on a solid, practice-based balance of expectations. Enhancing the parent’s ability to contribute to the education of their children, while also giving the pupils the best possible conditions for increased well-being and learning.

- *Textbox 12.2 School and sector initiatives, Unified School Strategy 2011-2015.*

As seen, very few specific targets or output measures are explicitly pinned out. Rather the initiatives outlines the processes and efforts which from the administrative perspective are to guide service delivery and what so to say is to be understood as indicators of sound educational quality. Yet, although not included in the overall strategy, the municipality has also, for each unit/service area, specified specific points of measurement and evaluation. For the school sector this includes: ‘*budget compliance*’, ‘*sickness absence*’ (teachers), ‘*special needs efforts and inclusion*’, ‘*early intervention*’, ‘*class size averages*’, ‘*enrolments in district schools*’, ‘*teacher’s class hours*’, ‘*proportion of pupils in afterschool services*’, ‘*final grades*’ and ‘*enrollment in preschool classes*’ (CC 14.05.13, head 42; 05.11.13, head 84). The criteria’s are mainly measures of output. Especially in terms of those intended to measure the cost-effectiveness of the service delivery (i.e. through the choice of ‘budget compliance’, ‘sickness’, ‘teacher’s hours’, ‘enrollment levels’ and ‘class size averages’).

An important objective both politically and administratively is that local decision-making on education matters are linked with budgetary responsibilities. Hence, the management is expected to fulfill the educational related objectives, while also ensuring budget compliance and improved resource utilization. This duality is also ingrained in the school management, as articulated by the Principal of District W:

”internal-, managerial- and political wise there is no doubt that it’s both. I’m pretty sure that I would be ‘short lived’ if unable to control spending. Then I might produce sound education results, but if it is at too high cost, my time as leader would be cut short...But education results are also important, principal appointments have been based on arguments that such results have been unsatisfactory.” (I J lin.630ff.)

Inclusion, District Z’ principal explains, is further a top priority. Together with the teachers’ and pupils’ competences and skills, this is the principle which guides service delivery in her district (I K lin.102). A new ‘strength-based’ pedagogy, the local head of afterschool care explains, is in this context all important, as: “*we must be an academic inclusive school; because without a sound education level...we can’t just enhance the inclusiveness while ignoring the educational capabilities, it’s important that everyone is encouraged to do their very best no matter what*” (I L lin.172-76). One specific outcome measure is however included in the overall political objectives, namely that of ensuring that 95% of the pupils complete further education. This target or objective, a department head from District W notes, is indeed crucial for how his team views the core objective of the school system:

“It transcends everything. In my mind it’s the most important, more important than final grades; dear me, when all is said and done they don’t matter. Competences and skills are of course essential and must be taught, but what really matters, is that they learn how to go to school (I I lin.535ff.).

### 12.3. FORMULA DESIGN, MUNICIPALITY B

The formula presented below illustrates how funds are allocated from the ‘*Center of Children & Youth*’ to the school districts. Building on a combination of actual enrollments and expected activity, the spending frame covers two appropriations, respectively one for special needs education and one for general education. Prior to the allocation a part of the budget is however set aside, intended to cover among other things externally supplied special needs education at special schools, transportation costs, and specific group-service supplied in Municipality B.

The spending allocation frame for the school year 2012/13 for a specific school district is set March 1<sup>st</sup> 2012 and consists of an allotment for general education plus an allotment for special needs education. The first part, covering the general education and the associated operating expenses is based on the political premise that it should be possible at least to supply the recommended number of lessons per week as prescribed by the Ministry of Education. However, with the precondition that all class levels receive at least 25 lessons per week. The actual allotment of lessons for the school year 2012/13 can be seen in CC 13.09.13 (head 73).

Taking into account the number of pupils enrolled in a district March 1<sup>st</sup> the associated lessons are converted into funds, on top of which additional resources for management, supplementary teaching and special needs education are added. The following factors are important when the total budgetary frame is to be found:

$A_i$  The number of pupils in the class level  $i = 0, 1, 2, \dots, 10$  enrolled in the district March 1<sup>st</sup>.<sup>16</sup>

$\hat{A}$  Number of children in age 6 to 15 living in the districts January 1<sup>st</sup>.

$L_i$  Number of lessons for level  $i$ .

$S_a$  The average salary per hour of teachers, preschool teachers, principals- and department heads.

$N$  The number of permanent teacher positions in the district.

$K$  Lessons for specific functions specified in the collective agreement.

The equation for the budgeted number of lessons  $Bu_i$  can now be represented as:

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<sup>16</sup> Note that due to fluctuations in enrollments in the 10<sup>th</sup> grade, enrollment expectations are adjusted taking into account the average enrollment level September 1<sup>st</sup> the last three years.

$$\text{Budgeted number of lessons } (Bu_l) = \sum_{i=0}^{10} A_i (L_i + 6,47) + N(40 + 24) + K.$$

Here 6.47 is a number of lessons allocated pr. pupil enrolled in the school district. This is indented to cover the managerial costs of a district and is assigned separately in order to draw attention to the goal of securing an efficient use of management time (CC 20.09.11, head 77). The 40 and 24 lessons per permanent teacher position are respectively intended to cover the costs of substitutes and further/supplementary training and education of teachers. The constant number K takes into account specific aspects prescribed in the collective agreement, e.g. extra lessons due to teachers over the age of 60 (CC 22.11.2011, head 103, 05.02.09, head 20, 25.09.12, head 81).

This budgeted number of lessons is converted into funds by first transforming it into gross hours by the factor 1924/1680 and then into funds by multiplying with  $S_a$ . That is represented by the following formula:

$$\frac{Bu_l 1924}{1680} S_a.$$

On top of this, funds for boarding and supplementary teaching and support less than 12 lessons per week are added. Denoting by  $p_1$  a joint pool of funds per individual, set aside for supplementary teaching and support, and likewise,  $p_2$ , a joint pool of funds for boarding. The following formula represents the total spending frame for general education and operating expenses

$$\frac{Bu_l 1924}{1680} S_a + \hat{A} p_1 + \sum_{i=0}^9 A_i p_2.$$

Observe that  $p_1$  is multiplied with  $\hat{A}$  and not just by the number of pupils enrolled. (CC 25.09.12, head 81).

In order to complete the formula for the total spending allocation frame, funds for special needs education and a number of specified purpose funds (IT, managerial and administrative training, specific development initiatives and long-term illnesses), have to be described. For the part of special needs education, the formula is simple as it may be written as  $\hat{A} p_3$ . Where  $p_3$  is a joint pool of funds per individual for single integrated special needs education and other types of special need services offered in Municipality B. As for IT two separate allotments are allocated in order to enable districts to buy computers and licenses to the pupils respectively to acquire computers and broadband for the teachers. Each district is allocated an amount  $p_4$  per pupil in order to cover the cost of the first type, and another amount  $p_5$  per teacher in order to cover the cost of computers and the establishment of broadband facilities for the teachers in their homes (04.09.12, head 70).

Two additional pools,  $C$  and  $DI$  are intended for managerial and administrative staff courses and more general development initiatives. Set aside in two separate pools of

funds, these are assigned in collaboration between the local management and the administration. Finally in order to account for actual long-term illnesses (>,31 days) and maternity leaves they receive a collective insurance payment  $I$  based on expected needs. The funds in this insurance scheme are paid by the districts through an annual premium dependent on the total expenditure on wages. In order to incentivize the management to focus on and reduce long-term illness the insurance scheme is constructed so that the repayment does not cover the full cost of the ‘insurance instance’, indeed only around 80%. The precise coverage is determined once a year and unused funds or potential deficits results in corrections of the following years premium (CC 22.05.07, head 57). All in all, this gives the following equation for the total spending allocation frame to be devolved to a district as set March 1<sup>st</sup>:

$$\text{Spending allocation frame} = \frac{Bu11924}{1680} S_a + \hat{A}(p_1 + p_3) + \sum_{i=0}^9 A_i(p_2 + p_4) + Np_5 + C + DI + I.$$

### 12.3.1. COMMENTS, PAYMENT PER PUPIL

The pupil dependent part of the formula above,

$$\frac{Bu11924}{1680} S_a + \sum_{i=0}^9 A_i p_2 .$$

takes as already mentioned the number of pupils enrolled in a district March 1<sup>st</sup>. This is indeed the case for the 0<sup>th</sup>-9<sup>th</sup> class levels, whereas for the 10<sup>th</sup> grade, which enters into  $S_a$ , the special procedure mentioned above is applied. The payment is intended to cover the cost of general education and boarding as well as the associated operating expenses. It is thus understood as a measure of the average costs of teaching a pupil in the mainstream/general environment. The payment, which is adjusted according the age level through the corresponding number of lessons, the  $L_i$ ’s, amounts approximately to DDK 43,000 per pupil (08.09.14, head 74).

### 12.3.2. COMMENTS, DEVOLVEMENT OF SPECIAL EDUCATIONAL COSTS

As mentioned the administration has chosen to retain the budgetary responsibilities for externally supplied special needs education (special needs schools outside the municipality). The devolvment of special needs education in the formula i.e.

$$\hat{A}(p_1 + p_3)$$

is thus intended to cover internally supplied services. As the funds for externally supplied services are deducted first the actual size of  $p_1$  and  $p_3$  is influenced by the expected need for externally supplied services. This need is determined through estimations on the effects of price changes and changes in service levels as a result of pupils leaving the system due to age. Roughly speaking half of the municipal budget for special needs education is set aside before determining the actual value of  $p_1$  and  $p_3$ . It is important to note, that the funds for supplementary teaching and sup-

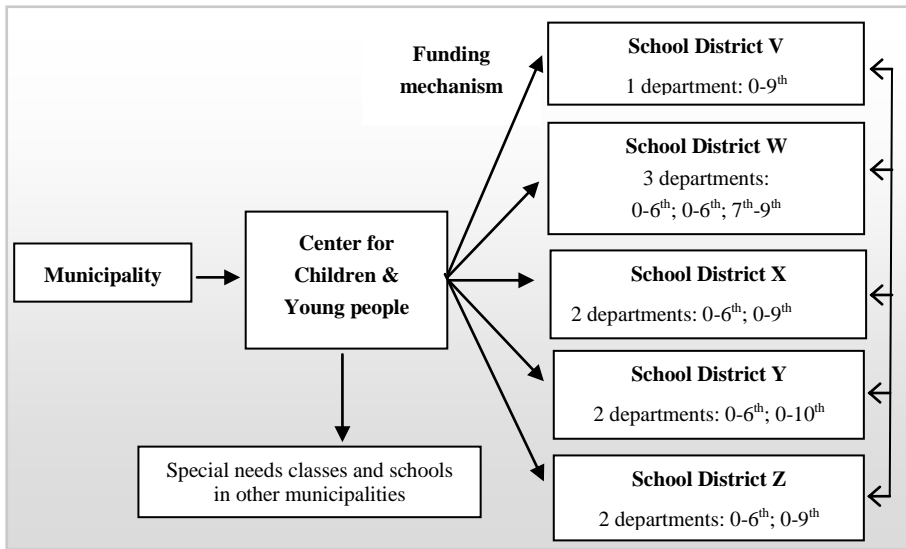
port has, following the legislative amendment in 2012, been transferred through  $p_1$  to the general budget. As explained by the municipal manager:

“Some funds for inclusion are simply transferred to the general frame. The overall concern is to enhance the scope for action and with it the resources of the general environment. We need to create a trend towards a situation where the general environment is given a stronger platform, thereby decreasing the demand for the special needs frame” (I N lin.191ff).

As noted, funds are allocated based on an expectation of needs, rather than on actual counts of pupils needs. The underlying thinking behind the devolvement, the municipal head describes: *“is that support isn’t to be given solely to the individual child. The child is a part of a broader set of relation and we’re of the opinion that it’s these relations and not merely the particular child, who must benefit”* (I M lin.71). Being multiplied by  $\hat{A}$  the payment  $p_1 + p_3$  comes into play for every child, in the age 6 to 15, living in a school district January 1<sup>st</sup>. Thereby making the allocation independent of actual needs. The allocation model, as described in the policy paper presented to the Children’s Committee, is thus:

“build on the principle that each district is responsible for all pupils living in the district, and decides and pays (fully or partly) for the special needs services given to their pupils. The model seeks to establish the greatest possible connection between decision-making competences and budgetary responsibilities”. (CC the 05.02.09, head 20)

For the school year 2012/13 the flow of funds can accordingly be illustrated as:



- *Figure 12.1. Flow of funds Municipality B, school year 2012/13*

Through the devolvement schools are expected to be able to establish services for single or group integrated pupils, as well as acquire seats in the jointly run special needs classes. The individual school is not allowed to establish local special needs classes (CC 20.09.11, head 77, 25.09.12, head 81). The home-district accordingly receives funds based on the number of pupils living in the district. In turn, it must cover the cost of all additional support and special education services given to a child in the age of 6-15 living in the district. This is even so if the school has never had any contact with the particular child (05.02.09, head 20). The home-district must reimburse the associated cost of the special needs services provided, to the school in which the child is actually enrolled (06.10.09, head 106). The administration though covers fully the cost special needs services provided outside Municipality B.

### 12.3.3. COMMENTS, MODEL PRECISION

The model is constructed so that it accommodates to concerns for horizontal equity, i.e. equal treatment of equals. This is the case for both general and special needs funding. For general education it is addressed by allotting districts the same amount of lessons per pupil enrolled only varying with the specific age-level and concerning special needs education by allotting the same amount to each district. A fixed payment triggered solely by home-addresses and not the specific needs of the pupils.

Both allotments are thus based on the understanding that the needs of the pupils are equally distributed across school districts, justifying an equal payment for all pupils. In 2009 a report, conducted as a part of the funding change efforts, measured the socio-demographic profiles of the then nine districts (CC 06.01.09, head 05). The analysis found only small differences across districts, with the proportion of pupils belonging to the 'risk group' varying from 0.9 to 5.2 %. Two districts though stood out with respectively a somewhat lower and a somewhat higher number of children belonging to the 'group at risk'. The general feeling however was that an allocation based on socio-demographic parameters, would only give a relative modest re-distribution of funds, albeit for some schools interim arrangements could be needed (05.02.09, head, 20). As a result the distribution of needs justified an allocation of special needs funds build solely on the objective indicator; the number of children in the age 6-15 living in the district.

### 12.4. SCALE OF BUDGETARY DEVOLVEMENT

The above presented spending frame formula represents the general rule for the distribution of funds in Municipality B. The appropriation level is in general high, in that, the budget authority to a large degree has been devolved to the *Center for Children & Young People* and from here further on to the individual school district. Some decision-making authority is however kept at the administrative level. Table 12.4 summarizes the precise division of budgetary responsibilities.

Municipal Administration	
	Outdoor up-keepings, building maintenance, extra cleaning and larger expansions Transportation for pupils to the nearest department and IT and broadband Special needs education at special schools outside the municipality The educational cost for pupils living in residential institutions and homes A specific group-service for pupils with severe special needs
Devolved to the school districts	
	Funds for general teaching, boarding and operating expenses Supplementary teaching, extra support less than 12 lessons per week Individual integrated special needs education given to pupils living in the district The purchase of special needs services at other municipal schools, in special needs classes or group-services

- Table 12.4 Division of financial responsibility centrally and locally

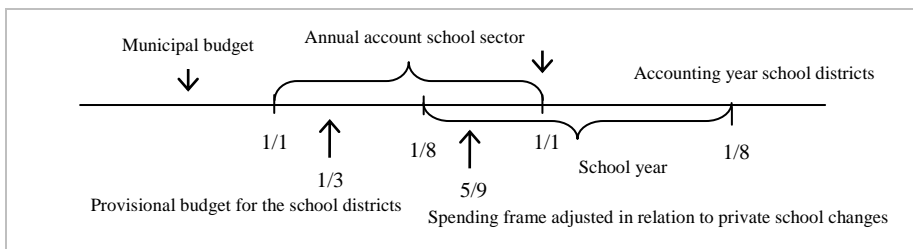
As for special needs education the administration defrays the full cost associated with the externally supplied services as well as the cost of a specific internally provided special needs group-service for pupils with severe needs together with that of pupils living in residential institutions and homes. Two pools of funds are here set aside, one intended to cover the cost of sudden outside-home placements and one for the external special needs education. Finally, the administration also retains the budgetary responsibility for a specific local group-service which caters to younger pupils with severe special needs, making them unable to profit from being included in any of the internally established special needs classes (CC 06.11.09, head 106). On top of this, the budgetary responsibility for bus transportation for pupils from home to the nearest district department is retained at the municipal level (CC 08.01.13, head 3). If however not enrolled in the nearest department the cost of transportation is not covered. Concerning IT a cost sharing arrangement, as described, means that each school is given additional funds for equipping pupils and teachers with computers and appropriate licenses together with establishing broadbands in the home of the teachers (CC 04.09.12, head 70).

## 12.5. BUDGETARY RELATED CONTROL COMPONENTS

Figure 12.2 visualizes the budgeting process and illustrates the important entries. As discussed, funds are appropriated in the expectation that they cover the spending needs of a school district the following school year (August to July). Importantly, the municipality has decided that the accounting year of the school districts is also to cover this period. The financial results of each district are thus assessed after July



31<sup>st</sup>, with the final account presented in November. Accordingly, the budget year do not follow the annual year which means that it only encompasses enrollment levels of one school year. The budget of the school sector however follows the rest of the municipality and is assessed at the end of the year, with the final account presented in April.



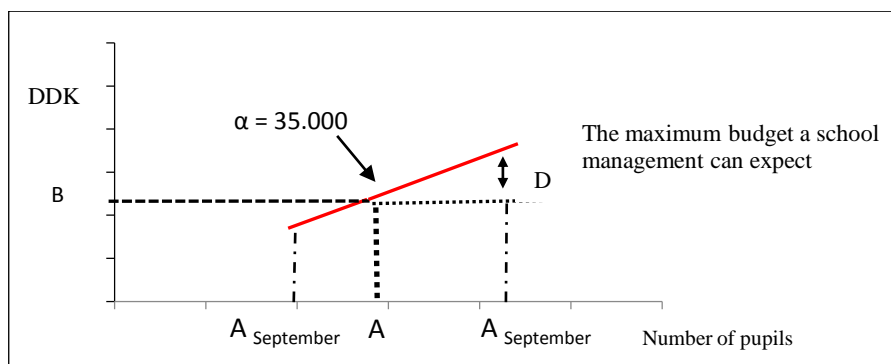
- Figure 12.2 Time dimensions in the budgeting process

When determining the spending frame different assessments are made. In December the need for externally provided special needs education is assessed, with the final decisions on referrals made in January. When the expected cost of this has been deducted, the remaining funds are, as explained, intended to cover the special needs services supplied within the municipality (I N lin.173; CC 06.10.09, head 106). As for the funds for general education registrations of up-coming preschoolers begin in October following the autumn vacation. Combined with forecasts on the expected number of pupils to be enrolled September 5<sup>th</sup>, a preliminary spending frame for general and special needs education is announced March 1<sup>st</sup>.

The payment for general education is based on a case payment inspired approach whereas the payments for special needs education and with supplementary teaching and support are capitation payment approaches. A case payment usually entails that the payer holds the financial risk for increases in output, leaving the providers exposed to the risk arising from a decreasing pupil number. In Municipality B this is attempted realized by adjusting the spending frame March 1<sup>st</sup> with the actual enrollment pattern September 5<sup>th</sup>. The provisional spending frame is hence adjusted in accordance with changing enrollments thereby taking into account the ability of the schools to retain and attract pupils. Yet, the effect of change in enrollments is confined to pertain mainly to private school competition with the spending frame being adjusted only to private school related changes or when a pupil selects a boarding school or a public school in another municipality. Thus not all *actual changes* are taken into account.

If able to attract a pupil previously enrolled in a private school the district is compensated with additional funds corresponding to 35,000 DDK (approximately 8,000 less than if the child had been enrolled March 1<sup>st</sup> (08.09.14, head 74)). Likewise, the district has to reimburse funds if a pupil enrolls in a private school, a boarding school or in a public school outside the municipality. Enrollment changes across the districts are thus ignored and districts are accordingly not to reimburse funds if a

pupil leaves in favor of another Municipality B public school (CC 09.10.12, head 89). The general dependence of the enrollment changes on the spending frame of a district can be illustrated as follows:



- Chart 12.1 Effects of changing pupil numbers on a district's budgetary frame

The first coordinate in point (A,B) represents the number of pupils enrolled in a district March 1<sup>st</sup> and the second the corresponding spending frame. As a starting point the allocation of funds as computed March 1<sup>st</sup> is a full and final distribution, except for pupils leaving for a private school or other non municipal schools. If from March 1<sup>st</sup> to September 5<sup>th</sup> a pupil leaves in favor of a boarding school, a private school or another public school outside the municipality the district must reimburse 35,000 DDK. In the chart this corresponds to the slope of bold red line. If however a child changes it's officially registered address to somewhere outside Municipality B the district is allowed to keep the funds. Likewise, if a school enrolls a pupil who previously was attending a private school it will receive additional funding; illustrated in the chart by the height D. To make precise, changes in enrollment patterns between public providers within Municipality B does therefore not affect the size of the final spending allocation frame.

As for the part of funding allocated through the capitation based approach a fixed amount, only taking into consideration the number of children in the age 6-15 living in the district, is given. The spending frame is hence not affected by the actual needs of pupils. If however for some reason a child changes special needs services the district must, starting from the particular month, pay the cost of the new services. The spending frame for a particular year will therefore in general only exceed point B if the school attracts extra private school pupils. Changes in special needs for pupils enrolled outside their home-district may though affect the available spending frame both positively and negatively according to the particular school being the provider or payer (CC 06.10.09, head 106; 20.09.11, head 77; 09.10.12, head 89).

Municipality B at the outset funds through the principle of gross appropriation meaning that the budget holder is only allowed to incur obligations or make payments which have been appropriated. Steps have however been implemented with

the purpose of securing a predictable level of service over the course of a school year. This includes allowing the district to carry forward unspent appropriations across budget/school years. Each district is thus allowed/must carry forward full surpluses or deficits to the following school year (CC 31.11.12 head 95). This is done in order to take in to account the fact that school years may differ and is for the financial employee, closely linked to the devolvement of special needs funds:

“If in one year a school has many pupils with extra needs, and a lot of resources have been spent on this account resulting in a deficit, then you’ll have fewer resources to spend next year. We recognize that school years are different – you somehow have to carry it over. But the same goes for a good year where things have just worked out fine– giving a surplus of special needs funds – then they’re just carried forward” (I O lin.216ff)

The fact that adjustments are confined to particular enrollment changes is further intended to give the management a level of stability when planning the activities of the upcoming school year (CC 08.09.14, head 74). This stability is greatly appreciated, as noted by a department head from District W, and would disappear if all pupil transfers were taken into account. Yet, the fact that the budget is indeed adjusted is crucial: *“We’ve to plan with the precondition that the budget is adjusted in September. You could say that if all changes were considered it would be more complicated, with some experiencing huge fluctuations also across school years”* (I I lin.194-97). When planning the school year, District W’ principal notes, it becomes extremely important to remember that the provisional spending frame is not definitive and that changes in enrollments numbers can indeed affect the final frame:

“In the beginning of the year we get some very preliminary numbers, that is, the number of lessons the different form levels are to trigger...we also get a preliminary allotment for special services in the school and for pupils in other municipal services...but we always have to say ‘remember it’s only preliminary numbers’...What is crucial, in an enrollment based model, is retaining a firm grip on where one’s pupils are, and that they’re actually there. I’m very preoccupied with this; I was so also before, but now I really want to know how our pupil numbers are” (I J lin.147ff).

In order to reduce the associated uncertainty the principal of District Z is also aware of creating a clearer picture of enrollment changes: *“We try to estimate and speak to the pupils in 7<sup>th</sup> and 8<sup>th</sup> grade, asking if they are considering boarding schools?”* (I K lin.341). Yet, the actual spending frame is also heavily affected by how many internally supplied services are given to children living in the district, but enrolled outside the home-district. In these cases the specific service decisions are not made by the home-district school and this, both principals argue, affect their ability to know the amount to be paid to other schools (I K lin.333). This, District W’ principal stresses, is not at least troublesome as changes in the services delivered to these children can take place at a month’s notice (I J lin.514). Overall, the financial em-

ployee agrees, the definitiveness of the estimated frame is somewhat uncertain as changes in the needs or special education services: *“is something which can occur during the year, ‘Hey! One of them just ended up in a special needs class and now we’ve to pay for it, where are we to find the money?’”* (I O lin.470ff.).

## 12.6. SCOPE OF MANAGERIAL DISCRETION AND AUTONOMY

Management by objectives and results, combined with decentralization of decision-making power, are ascribed to be the main principles of governance in Municipality B (CC 01.02.11, head 11). This is intended to encourage local innovation and with it better resource utilization. In fact, the financial employee argues, the large degree of budgetary freedom in fact comes with an expectation of and the: *“freedom to be innovative and improving the school. In fact being obliged to do so. Of course within the broader municipal school frame”* (I O lin. 35). Through the devolvement, the municipal manager notes, decision-making power and budgetary responsibility is connected thus countering the *“complete decoupling of these [in the prior model, which] meant that the local management had no incentive to think differently”* (I N lin.24ff). The more extensive devolvement is in the eye of the financial employee especially important in:

*“making budgets and education, go together, in that, the schools are stimulated to think creatively about their tasks. They have the funds, and will not get anything out of asking for more, because there aren’t any. The funds are devolved, that is actually a very crucial point...we agreed that we should not have any additional funds...we had to force them to think creatively and look at everything”* (I O lin.87ff).

The management is thus as stated in the “Unified School Strategy 2011-15, only *“bound by the politically decided performance targets, but is otherwise in charge of determining how the school fulfills the specific targets* (Municipal board 28.03.11, head 38). In order to enhance the local scope for discretion the principle of gross appropriations is thus modified by allowing the district to spent funds across salaries and other operating expenses as they see fit (CC 22.05.07, head 57) and moreover by allowing line-item discretion across the otherwise separate appropriations for general and special needs education. Accordingly, once the cost of special needs services supplied to home-district children enrolled in other districts has been paid, the management enjoys considerable freedom over how funds are to be spent. This freedom, the principal of District Z stresses, leaves room for maneuver. At least as long as the quality expectations are upheld:

*“We’re in an organization where we actually have a great level of control, within the broader frames, over how we spent our funds. I can juggle with hours and staff, with funds and materials and with working hours and agreements. I can in fact juggle around with a lot of things, as*

long as the municipality will not be ashamed of displaying the quality report and that I have performed as promised” (I K lin.77ff.).

An exception for this freedom is that districts running joint special needs services are not allowed to transfer funds from the special needs classes to the general education environment (13.11.12, head 95). In general however, the financial employee explains, local purchasing and working hour agreements are some of the only things which in effect restrict the local decision-making scope:

“They [the management] have limits in so far of union working hour agreements. Also they must comply with the central municipal purchasing agreements when buying computers...Otherwise, precisely how they spend the funds is actually up to them. We have schools with many elderly teachers, a factor which may complicate their ability to fulfill the recommendation for the number of lessons. They might thus want to prioritize more teachers, thus leaving fewer funds for other things. Other schools may have chosen not to fill vacancies instead investing elsewhere” (I O lin.353ff.).

On top of this, broader municipal decisions however also affect the decision-making scope. For example in terms of staffing where the decrease in pupil numbers reduces the need for teachers correspondingly. In response to this a municipal ‘job bank’ has been created which the intention to circulate teachers who has come to be in excess. Consequently, the financial employee notes: *“no one is allowed to advertise for new positions before we have made sure that no teachers are left out due to budgetary concerns”* (I O lin.148). Overall, District Z’ principal summarizes, the actual decision-making scope is in fact substantially affected by:

“municipal decisions, partly financial and partly municipal policies which bring attention to the policy areas we’re to focus on. The administration also frames what is to happen but also financial considerations which say ‘if I do this, it will be this costly and I have to consider whether I can afford it’...But in many ways it’s the Children’s Committee who plays the biggest role, because it’s here the political debate takes place, on cutbacks and new policies – being as it is political it’s not always a 1+1 equals 2 solution” (I K lin.89ff).

Similar, District W’ principal notes, external decisions do affect her scope for making decisions:

“restrictions may occur when not being able to decide when the most unprofitable department is to close. The degree of freedom is there, but neither I nor my school board can make such decisions alone, because it’s politics whether a local service is to remain. The managerial challenge thus becomes that of creating the understanding that everyone must contribute (I J lin.100ff)

With the division of responsibilities the management is responsible for the cost of general education and the internally supplied special needs education (i.e. single-integrated teaching, “IT-backpacks”, special classes and group services), while the cost of the severe special needs services given by externally supplied services is defrayed by the administration. The creation of an accountable management was a crucial aim of the devolvement, as seen in the proposal presented to the Children’s Committee on the 18.11.08. In terms of special needs education and support this necessitates taking into account the budgetary consequences of the decisions made:

- *all decisions made by a principal must come with a financial commitment (liability),*
- *a local recommendation to the Referring Committee must have a financial commitment attached*
- *the principal is part of the central Referral Committee when decisions, affecting the financial commitments of the school, are taken (CC18.11.08, head 114).*

Instilling a budgetary focus, the municipality manager notes, is crucial and entails:

“we don’t accept recommendations to the Referring Committee without a price tag – they must address the fact that finances are a part of quality – that is, will you get much more out of spending a million, or 300.000 more or could the 300.000 be better spent elsewhere?” (I N lin.356-59).

The devolvement of decision-making thus tried to connect local decisions on cost and educational matters, exemplified by matters of class sizes, and further giving the management both educational- and budgetary motivation for retaining and attracting pupils (CC 20.09.11, head 77). In relation to the latter the management is, in cooperation with the school board, allowed to determine local guidelines for enrollments and for the establishment of new preschool classes (CC 25.10.11, head 90). As for deciding to which pupils’ special educational support and inclusive services is to be given the full decision-making power is placed with the management. This makes the ‘enrollment’-principal the final authority for deciding on matters concerning special educational initiatives orchestrated and conducted in the general environment. Potentially there may here exist a separation between budgetary and educational responsibility, in that, the budgetary responsibility is held fully by the home-district, while decisions on which types education services are to be given is held by the district in which the child is enrolled(CC 06.10.09, head 106)..

With regard to the more comprehensive educational services (special needs classes and group services) the final decision making authority for deciding which pupils are to be referred is on the contrary held by a *Referring Committee*. The principal though still plays an important role by holding the authority of recommendation and is further a part of the Referring Committee and so is the home-district principal in cases where the child is enrolled elsewhere. Albeit, the principal is responsible for recommending the child, the committee holds the full and final authority in terms of deciding how much and where such services are to be given (CC 18.11.08, head

114; 06.10.09, head 106). Upholding a central function responsible for referring pupils to the special needs classes or group services, the municipal manager notes, was very important in order to: *have a place which allows for co-ordination across districts to take place. Otherwise we could end-up in a situation where one principal makes a decision for a specific service without taking into account that others might need it more*” (I N lin.48ff.). Although the principals are not allowed to establish local special needs classes of their own they are included in the discussions of how many special needs classes are to be created and where the specific special group service is to be placed: *“In this way [the municipal manager stresses] they’re approving our services, in turn, making them sort of obliged to support them. It’s something we run together. It’s not this school’ or this department’ special needs class, it’s [Municipality B]”* (I O lin. 585ff.).

Having been made the responsible part for a larger part of the funds has, a department head in District W notes, affected the local managerial practice with the: *“impact that we’ve become more aware of what we spent our funds on, considering maybe more carefully what is needed for a child to thrive here or there – moving away from automatic reactions”* (I I lin.324-26). The management the, after-school head of District Z notes, has become more aware of the associated consequences:

“I like this model better because [prior] it was easier to divert our problems onto someone else. Back then we were given no responsibility at all at least we did not feel responsible for how the money was spent. It’s apparent that after more funds have been devolved people have improved their ability to include. Then you might ask ‘couldn’t they do that before? They could, but it was just easier to say, ‘someone else must deal with this’, because it was not clear that it was from our frame that the money was taken” (I L lin.113ff.).

Yet, as noted by District W’ principal, albeit the devolvement of funds has directed more attention to the ways in which resources are spent, the achievement of opening up for more flexible and customized services to the benefit the pupils is far from automatic. Rather, the success is strongly tied to the sound pedagogical practice existing at our school: *“I think the flexibility is enhanced, in the big picture as well as in the individual team, but in my opinion this is only because we had a good established practice already, an including and acknowledging practice. But also because our volume is big”* (I J lin.683ff.).

## 12.7. OPEN-ENROLLMENT CLAUSES & PRIVATE SCHOOL RATE

Municipality B is divided into five district with in total 10 departments making the distance relative big albeit the overall size is much smaller than in Municipality A. Six private school providers are present in Municipality B, in addition to two boarding schools, which each of the public school district containing at least one private

school. Service wise, one private school offers only schooling from preschool to 8<sup>th</sup> grade, one caters only to pupils with special needs and yet another is founded on a very strong religious foundation. Five out of the six private schools are one-entry schools, while the last is quite big with up to four class tracks on each form level.

A clear political objective is the creation of competition among providers. The public schools are in this context encouraged to establish different profiles. Rewarding the schools for their ability to retain and attract pupils, motivating them to compete over pupils, was, as noted by the financial employee, important considerations behind the decision to change the funding model. Going from solely reimbursing schools for the number of classes established to a pupil dependent model. The prior barriers of transition are removed and the *“pupil dependent model gives optimal incentives for schools to attract as many as possible. That is, making themselves interesting in the eyes of the local community, but especially directed at those enrolled in private schools”* (I O lin.57-58) As seen in Table 12.5 it is not uncommon for pupils in Municipality B to be enrolled in departments outside their home-district. For the school year 2012/13, 33% were in average enrolled in private school services, whereas 9% of the pupils had de-selected their own public school in favor for another public school.

	District V	District W	District X	District Y	District Z	Average
Private schools	21%	28%	31%	43%	19%	33%
Other public schools	10%	7%	12%	9%	9%	9%

- Table 12.5 Enrollment rates in other district than the home-district

From 2011/12 to 2012/13 the private school enrollment rate rose 2.8 percentage point (25.09.12, head 86). A vast challenge as noted by the financial employee:

“Our private schools can fill all seats available. They have a fairly stable capacity level, the biggest has even just expanded, opening up a fourth track in the preschool, 1<sup>st</sup>, and 2<sup>nd</sup> grade. They expect to be continuously able to fill it in the forthcoming years. There is, in other words, a stable increase in private school seats available combined with a decreasing number of children. So you can say they are taking over more and more intensifying the competitiveness of the environment” (I O lin.79ff)

Private school competition is a fact and although the main focus locally is that of countering this type of competition, public caused competition is also increasing. As explained by the District Z’ head of afterschool, competition indeed also stems from public providers, seeking to enroll pupils not belonging to their own district:

I won’t call it stealing, because it’s the parents’ choice. But if a school takes a backseat, is complacent and not proactive, then I say: ‘get into the game like the rest of us and become a part of the challenge!’ Otherwise



it's in my mind self-imposed. Everyone has the same opportunities to get things in the local paper or to tell good stories. And if you don't become a part of that, then you will have to deal with the effects (I L lin.727ff.).

In this context each school management has been given free scope for formulating local enrollment guidelines (CC 25.10.11, head 90) and *"in reality [the financial employee explains] they have been given green light to enroll all pupils seeking the school, and some of have done so"* (I O lin.562). Different guidelines thus exist for when a pupil from another district can be enrolled. Some districts, the financial employee notes, have chosen to set no limit that is going to the legally prescribed limit of 28 pupils per class. *"Partly because of the decrease in pupil numbers, but also because it can be seen as a sign of popularity and of a sound reputation – that you're picked. Understandable they prefer pupils and parents who have chosen them"* (I O lin.563-66). Other districts have reserved all seats above pupil number 24 for newcomers to the district (25.09.12, head 86). Summarizing the dilemma surrounding such a choice District W' principal notes:

We've talked about how far we want to go – will we go above 24, how close to 28 will we go, will we go above because we're on a market and it's money in the bank next year? We've decided no common principle. It depends on the situation in the class and in the form grade if we are to enroll a pupil who isn't actually ours. But there isn't any doubt that we give a warm welcome to all new parents, who say that they're thinking about changing school. They get the full showing round!(I J lin.773ff)

Table 12.6 contains the class sizes of the school year of 2012/13. The overall average is 21.5 per class, an increase from the 20.5 average of the year before (13.11.2012, head 90). Since class sizes are registered on a district level, variations across departments are not visible. Yet, it is clear that big differences evidently exist across the five school districts.

	District V	District W	District X	District Y	District Z
Preschool	25.5	25.8	24.0	24.7	19.0
1 <sup>st</sup>	20.0	25.3	20.0	25.0	12.5
2 <sup>nd</sup>	22.0	20.2	18.3	25.0	21.5
3 <sup>rd</sup>	24.0	22.0	17.8	20.8	22.5
4 <sup>th</sup>	28.5	29.0	20.5	18.6	19.0
5 <sup>th</sup>	22.0	21.2	17.5	20.8	17.0
6 <sup>th</sup>	25.5	26.0	18.3	23.2	18.3
7 <sup>th</sup>	22.5	23.3	22.0	21.5	18.5
8 <sup>th</sup>	26.5	20.3	20.0	21.6	23.0
9 <sup>th</sup>	24.0	21.6	25.5	15.2	16.0
Average 2011/12	23	21.4	19.7	19.8	19.3
Average 2012/13	24.1	23.1	19.9	21.2	18.6

- Table 12.6 Average class size, September 5<sup>th</sup> 2012 *source* Result Status 2012

## 12.8. SYSTEMS FOR EVALUATION AND CONTROL

Quality and budgetary related control is also part of the funding model. This includes a Quality Report which mainly seeks to evaluate education related matters as well as a comprehensive evaluations report, called 'Result Status', which is intended to bring about "*a sound foundation for management control at the political as well as the administrative level* (19.02.12, head 14). On top of this each principal signs a 'Result Contract' which specifies the goals he/she is committed to fulfill.

### 12.8.1. BUDGETARY CONTROL

A range of means are implemented in order to ensure budget compliance, including face-to-face meetings and budgetary follow-ups. Meetings between the municipal administration and the principals take place on a regular basis and here, the financial employee explains, budgets and the financial situation of the school system as a whole is discussed. This is also on the agenda when local employee meetings are held and here the questions are typically on: *why budgets are lower compared to last year. I've held meetings with the staff, explaining that when we have 120 pupils less. It influences the budget...10 pupils' means you have to say goodbye to a colleague* (I O lin.759ff.). Yet, the day-to-day budgetary situation is not at the forefront of the teachers' mind, a department head explains:

"Actually they don't really care that much. They just want to know if they have funds at their disposal. Of course they are interested. We have had layoffs, and how is the situation now? And when the municipality announces that the Children's Area is to be cut by 20 million then they become nervous – because is it us who will be at the receiving end again? Otherwise they aren't that worried about it" (I L lin.92ff)

Monthly budgetary follow-ups are conducted by the management, with the intention of ensuring that a continuous focus is kept on the budgetary situation of the district. Here the actual budgetary situation is registered, together with a prognosis of the expected result of the full school year. If larger surplus/deficit than 5% is expected the cause of this must be explained. Four times an employee from the administration joins in and at these meetings District Z' principal explains: "*we look at whether salaries are in check. Do we see things right? Where have our funds been spent and why so many in this particular month and not in this? And this we must be able to account for to the politicians; why do our results look the way they do*" (I K lin.323ff). At a quarterly basis the results are presented to the Children's Committee in the Result Status and this, the financial employee explains, opens up for:

"them [the politicians] to see how things are going. We also use it in order to ask 'are there red flags we have to check and talk about. A couple of times we have experienced that a school has been in trouble and then

the head of the School Sector has told them to come up with a plan of action for how they intended to solve it” (I O lin.275ff).

Taking part in the budgetary follow-ups gives the administration a chance of gaining deeper insight into how resources are spent, as well as ensuring that the management takes all matters into consideration. This is especially important in the spring when the budget of the next year is to be set:

“We try to cover the field: how is situation concerning the number of lessons, at the minimum or the recommended level? How is the class sizes, are you considering amalgamations of classes or other things in order to utilize resources as efficient as possible? How about funds for special needs services – are there any left – both for external and internal services? So it’s a broad range of questions” (I O lin.261ff.)

The Result Status takes on different forms depending on when it is conducted. In February and September the report is minor, focusing exclusively on budgetary control, while the reports presented in May and November are of a more comprehensive nature evaluating also enrollment numbers and the actual spending of funds dedicated to special needs education. On top of this the management also gives estimates of their final results, presenting also the percentage of the original appropriation which has been spent so far (19.02.12, head 14).

The budgetary control focuses narrowly on budget compliance, leaving out deeper analysis of the efficiency, productivity or thrift with which resources are spent at each school. Deeper benchmarking of results is thus not included and the system purely measures the ability of the districts to comply with the budget. Table 11.7 summarizes the districts’ ability to comply with budgets and to estimate final results when conducting the follow-up presented at the spring Result Status. It is important to note that amalgamations have taken place twice over the time-period covered. Affecting not only the number of districts and with it the size of the budget allocated this also means the precise percentages may not be comparable across years.

Forecast of final results at the last budget follow-up in the spring		Actual result of school year
2008/09	<p>8 of the 9 districts expect their budget to balance or to end up with surpluses.</p> <p>The last district expects a deficit, which is ascribed to a lack of efficiency gains, overestimated service levels and economic strains from the harmonization efforts taken following the structural reform</p>	<p>Seven districts carry-forward larger surpluses than expected (ranging from 2-11% of their budget).</p> <p>One district balance the budget, while the last ends up with a budget deficit (-6%)</p>
2009/10	<p>Of the now eight districts, six expect to carry forward minor surpluses, while the remaining two expect to end up with minor deficits</p>	<p>Six districts carry-forward surpluses (albeit lower than the previous year, 1-9%)</p> <p>Two districts end up with deficits (one which was not predicted, -1%). For the last district, this meant a rise in the existing deficit. Ascribed to one-entry expenses related to staff-adjustments (-9%)</p>

2010/11	Four districts expect to end up with deficits, albeit for two these will be relative small. The four remaining expect surpluses, (two of which are relative minor)	Four districts end up with surpluses (1-6%, two of which was not predicted).  The remaining four end up with deficits (-1 to -10%) (two of which was not predicted)
2011/12	Five districts expect surpluses.  The remaining three districts expect deficits. Two of them however expects to be able to run down some of their accumulated deficits	Four out of the eight districts accumulate deficits. For two, the deficits are relative small (-1%/-2%), while it for the third is -6% and ascribed to under-estimation of expenditures. As for the fourth, the previous accumulated deficit is cancelled, leaving the district only with a deficit of -1%.  The remaining three balance their budget, and carry forward large surpluses (5 & 12%)
2012/13	Of the now five districts, four expect to respectively carry forward (2) or balance their budget (2). The last district expects a deficit, due to a previously accumulated one in one of the now amalgamated departments.	All five districts carry forward surpluses (2-12%). This is ascribed to the national lock-out which has meant that all districts have spent less than budgeted.

- *Table 12.7 Budget predictions at the last budget follow-up in the spring and final result, 2009-13. Source: Result Status & Annual account school year 2009-13*<sup>17</sup>

As seen, the ability of the management to predict the final result and comply with the budget is somewhat mixed. As the budgetary control takes into account only the districts' ability to comply, the deeper cause of these differences is not examined and can thus not directly be ascribed to more or less efficient or thrifty uses of resources. Yet, the two districts with respectively the lowest and next highest levels of children belonging to the 'risk group' have however continuously carried forward stable and at times large surpluses. Furthermore they were not affected by the 2012 merger of schools.

Three new districts were established in 2012. One through the merger of two districts which until 2012 had produced somewhat modest respectively steadier surpluses. The second district was established through the merger of two districts both carrying forward deficits, one of which amounted to 6% of the annual frame. Finally the third district was established through the amalgamation of two districts both having substantial deficits. Stemming back from 08/09 the deficit continuously grew until it in 2012 was cancelled in conjunction with the change in funding and the new structure. This was done so to give the new districts an 'equal footing'. Here also any prior interim funding arrangements were cancelled (CC 20.09.11, head 77; 22.11.11, head 103) One district has moreover over the course of the period petitioned the administration for cancelations of their accumulated deficits. The petition

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<sup>17</sup> CC (26.05.09, head 56); (06.10.09, head 102); (13.04.10, head 37); (15.06.10, head 74); (09.11.10, head 110); (05.04.11, head 33); (25.10.11, head 89); (08.05.12, head 33); (13.11.12, head 95); (14.05.12, head 42); (05.11.13, head 85).

was handed in, in 2013 following the new structure and was ascribed to an accumulated deficit in one of two previously independent schools. The administration recommended the petition to be denied, arguing that deficits and surpluses are to be carried forward and that the deficit established was not a result of political decisions. Unlike the situation described above. However the politicians overruled this dismissal (CC 02.04.13, head 31) and later the administration therefore recommended also this deficit to be cancelled; citing the new turnaround plan which among other things entailed that a new principal was to be employed. The latter recommendation was accepted by the *Children's Committee* and the otherwise recommended amount to be granted to the district was in fact raised (CC 14.05.13, head 45).

This shows that supplementary grants can be awarded, albeit, it is argued, this is only done in cases where politically related matters have affected the district ability to be financial viable. The grants have however not been given without accompanying sanctions, including e.g. the replacement of a principal in addition to a close monitoring together with the development of turnaround plans in which the management explains how they will solve the budgetary problem facing the district.

### 12.8.2. QUALITY CONTROL

Quality control is conducted through the yearly Quality Report, in the semiannual Result Status conducted in May and September and in the Result Contract which describes the areas of focus the principal is committed to. All in all, this is intended to ensure a systematic documentation of the service delivered. Whereas the Quality Report is the typical instrument used by the Danish municipalities for presenting evaluations of their school services, Municipality B has applied to the Ministry of Education for permission to present this type of data in another form as well – namely in the *Result Status*. The Quality Report is thus somewhat downplayed functioning now mainly as an evaluation tool for the implementation of the municipality's Unified School Strategy. Covering only the predetermined indicators identified in the 2012/13 Statutory Order on Quality Reports (i.e. pupil' education levels, reading, absenteeism, IT, teacher' competences, enrollment numbers and private school enrollments ect.) (05.11.13, head 86). This, District W' principal notes, makes the report quite retrospective and affect the actual usefulness of it:

“Nothing written in the Quality Report should come as a surprise. It's extremely retrospective. When we get the report in the autumn it's from the long-since ended school year. It shouldn't come as a surprise for a headmaster that a child leaves, because you should be focused on this in the day-to-day work, just like the rest of the matters. What can surprise you, is that you may not know how things are in the neighboring school, and then we can begin saying 'oh I actually thought we were quite similar, I wonder what they have done? And if their results are better you can start a dialog and that's where it may become surprising' (I J lin.548ff)

The Result Status is in the context of the schools intended to create a solid basis for evaluation, providing both descriptions of the general developments of the system as well as deeper understandings of the individual service units. While the Result Status' presented in February and September take on a condensed form focusing solely on budgetary matters, the reports conducted in May and November are of a more comprehensive nature, covering both budgetary and education aspects (19.02.12, head 14). In 2012 and 2013 including the evaluation of the following indicators, i.e. 'sickness absence' (teachers), 'special needs efforts and inclusion', 'early intervention', 'class size averages', 'enrolments in district schools', 'teacher's class hours' and 'proportion of pupils in afterschool services', 'final grades' and 'enrollments in preschool classes' (CC 14.05.13, head 42, 05.11.13, head 84,). The fulfillment of the goal of each indicator is evaluated on a three point scale, visualized by different colors. Green indicates that the goal is fulfilled or is expected to be so. Yellow that it is nearly fulfilled and red that the goal will not be fulfilled within the time set. In cases where a non-quantifiable goal is included the associated color visualizes whether the administration views the result to be positive or negative.

The fact that results are made public, a department head from District W notes, affects the daily work, bringing with it a public focus on the identified indicators. Making them even more important; *"because they're measured facts. Some parents may even confront us with and have opinions on it. I remember a situation where I attended a parents-teacher meeting in 1<sup>st</sup> grade, and a father wanted to know what we intended to do about the grades"* (I I lin.555ff.). The fact that the goals are mainly hard outcomes indicators, District W' principal notes, can be problematic. *"We need clear goals, which are tangible, also for some of the softer areas. Not necessarily tangible in the sense of a quantifiable value, but still so tangible that benchmarking can take place and so that parents and politicians can relate"* (I J lin.998ff). Until such measuring points are developed the focus on the mere focus on the hard outcome measures affects how the results are used and presented:

*"It isn't because grade objectives aren't relevant. It's not because it isn't relevant for a 1<sup>st</sup> grade teacher, is't just a long way...and although you're focused on your pupils' learning in the day-to-day work it [final grades] might not be precisely that you keep in mind. Rather it's the well-being of pupils and if they are reading? It's a simple way to measure quality, but never mind; then we must just include additional things that we find important. I try to make it very clear throughout the organization; 'yes, yes, politicians tend to measure us on this so we need to be tentative and acknowledge that they do so, not be indifferent. But I know that we are and can much more'. It's an important signal to send to the employees that this isn't the only thing upon which they're judged"* (I J lin.1013ff).

## **CHAPTER 13. BUDGETARY RISK & COMPETITIVE PRESSURE, MUNICIPALITY B**

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### **13.1. INTRODUCTION**

This chapter analyzes the above presented formula funding model in the light of the framework developed in Chapter 7. The level of competitive pressure and budgetary risk imposed onto the districts by the formula funding model is studied and the model is placed at its relevant position in the rectangle of Figure 7.4. Hereafter the inherent incentive structures of the model are studied, thereby enabling a discussion of the theoretical practice created by the model

### **13.2. LEVEL OF BUDGETARY RISK**

The formula is composed of respectively a case payment inspired approach for general education and a capitation inspired payment for special educational services. This leaves the districts financially responsible for all decisions pertaining to pupils enrolled in the general environment as well as for all education cost related to internally supplied inclusive-seeking- and special needs services (i.e. single-integrated teaching, “IT-backpacks”, special classes and group services) given to children in the age 6-15 living in the district. The management is further responsible for deciding whether the needs of a particular child is better met by acquiring services elsewhere in special needs classes or groups. The final decision on which services the particular child is referred to is however made by the Referral Committee.

The scale of budgetary devolvement means, roughly speaking, that half of the municipal budget for special needs education is devolved through  $p_1$  and  $p_3$ , leaving the rest at the responsibility of the administration. This latter includes the cost of all special needs services acquired outside the municipality, making the devolvement of responsibilities for the special needs costs only somewhat comprehensive. A cost sharing arrangement further transfers the budgetary responsibility for one of the internally supplied group-services to the administration; reducing the related risk of enrolling pupils with more severe special needs as the budgetary responsibility in general is held by the administration.

At the outset, this places only a moderate level of budgetary risk with the schools. Yet as visualized in Figure 13.1 a few crucial aspects indeed magnify the level of budgetary risk placed upon the providers. One such matter is the size of the payment attached to each pupil enrolled. This fairly substantial amount makes the budget highly pupil dependent. Combined with the fact that the budget is further adjusted taking into account some specific types of enrollment changes, this places a high level of budgetary risk with the schools. Requiring strongly the management to take

into account that the spending frame announced in the spring is only preliminary. Case payments usually imply that the payer retains the risk of upward changes in activity, whilst the budget holder is exposed to the downward changes. In Municipality B this is sought established by adjusting the spending frame, so that, new enrollments from March to September to and from private, boarding, and other public schools outside the municipality are taken into account. Enrollment changes between the municipality's public schools or changes occurring during the rest of the year are however disregarded. This leaves the public school districts exposed only to specific changes in activity. Yet, it also means that all extra enrollments are not necessarily compensated with additional funding. Including for example new enrollments from other public schools, making this part of the model resemble a capitation payment. Since the budgetary effect of enrollment changes does not cover all changes, additional enrollments do indeed affect the potential risk. Moreover the districts bear the risk associated with situations where the actual needs of a pupil are not covered fairly by the attached payment. Although variations in needs have been documented they are accepted to be so small that varying payments are not considered necessary. Nevertheless, as the payment attached to each pupil enrolled may not cover the actual need the associated risk may vary across district due to differences in socio-demographic conditions. Likewise, with the introduction of district management the management must bear the budgetary risk associated with having to use funds across multiple departments with very different abilities to attract extra pupils and thus of becoming self-financed. This latter risk was earlier handled at a central level.

The part of the formula devoted to special educational funding is allocated as a fixed amount, depending on the number of children in the age 5-16 living in the district. A capitation payment approach is thus utilized for the two relevant allotments ( $p_1$  and  $p_3$ ), making also this part independent of actual needs or service levels. The districts thus bear the full budgetary risk stemming from variations in actual needs, including for example variations in the associated needs of newcomers to the school. In turn, they are however protected from having to reimburse funds in case of decreasing levels of needs and unspent funds can thus be kept if efficient solutions lead the district to spend less than expected. Line-item discretion and full carry-overs further reduces some of the risk placed with the schools. Line-item discretion opens up for funds to be spent on a different pattern than otherwise indicated in the original allocation, while the decision to allow full carry-overs is a mean to create locally a more long-term budgetary perspective. The management can as a result spend funds as they see fit, enjoying the full budgetary benefit of coming up with cost-effective solutions. The budgetary benefit of being allowed to bring forward unused funds must though be weighed against also having to bring forward potential deficits. Political decisions concerning budget overruns have however made the budget constraints imposed on the district somewhat soft, in that, additional funding has occasionally been given. Thus, albeit large overruns have been accompanied by immediate budgetary and managerial sanctions expectations of additional funding may



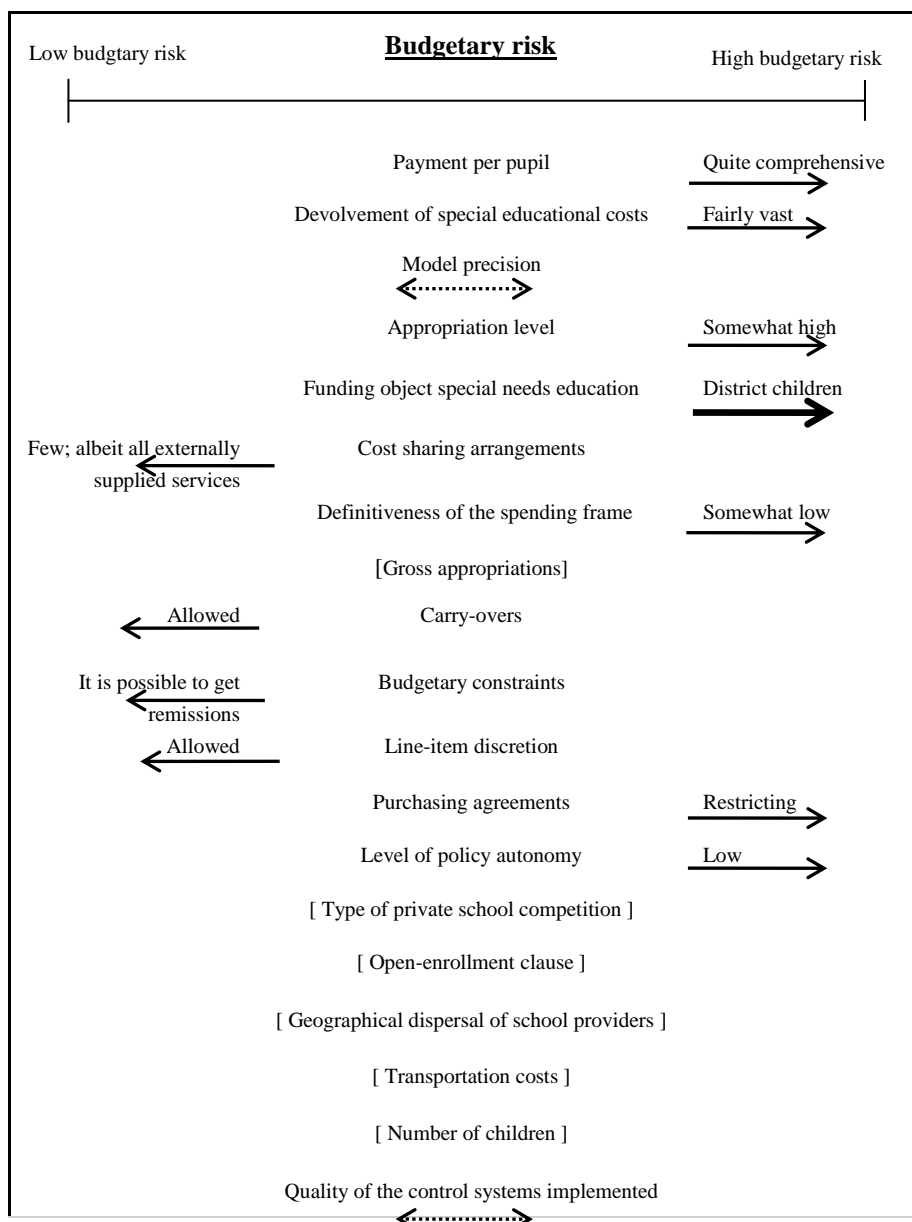
arise. This affects the related budgetary risk and the creation of proper incentives for cost control.

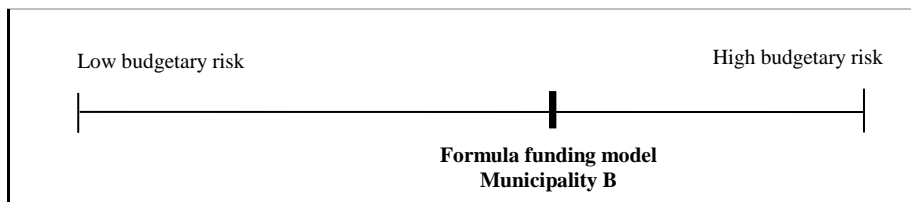
Important in this context is the choice of funding object. Whereas the object of funding for general education is ‘pupils enrolled’, it is the number of children in the age 5-16 living in the district that determines the size of special educational funding given to each district. A decoupling of budgetary authority and local decision-making power for special educational services given to pupils enrolled outside their home-district is thereby created. Where the ‘enrollment principal’ enjoys full authority over the type of locally provided inclusive services given to all pupils enrolled, the budgetary responsibility lies with the home-district. Likewise for special needs education the ‘enrollment principal’ is responsible for making recommendations to the Referring Committee, who then decides the service to which the child is to be referred, with the budgetary responsibility remaining with the home-district. The individual principal is thus potentially not the key decision-maker for parts of his/her own budget, in that, the decoupling entails that another principal/the referral committee can make decisions affecting the district’s budget. This influences heavily the local budgetary risk, especially for districts with many pupils enrolled elsewhere.

Other decisions for example municipal purchasing agreements may further restrict the otherwise large local decision-making scope. Moreover the individual district is not allowed to establish local special needs classes, in that, the existing classes offering such services are understood as joint services for the entire school system. The individual district thus has to buy a seat in one of these services when the needs of a particular child can only be met in such environments. To which service the child is referred is however decided by the Referring Committee. As already remarked the full budgetary risk (for district pupils) is placed with the local management if the pupil attends locally (within the district) provided services. In turn however they avoid paying the monthly fees for buying services from other districts, giving them a larger scope for action over how funds are to be spent. Yet, such a decision may come to affect the local teaching environment.

For the schools organizing special needs classes the budgetary risk associated with variations in activities is reduced by the fact that districts are not allowed to establish special needs classes of their own. The “supplier schools’ must however ensure that the services supplied meet the required standards in order to uphold enrollment levels and their budget base. If not, the enhanced decision-making freedom given through the devolvement of funds exposes them to the risk of the “buyer school” choosing instead to re-include the pupils in their own services. This risk is of course counterbalanced by the ban on new local special needs classes, making the budgetary risk associated with a decision to re-include rather heavy due to the restricted scope for establishing more comprehensive support locally.

Lastly, although schools are encouraged to develop individual service profiles, they must still abide by the overall objectives of the service area, making the policy autonomy low. Moreover, though the quality control systems in this context provide thorough evaluations of education results they bring with them no direct or immediate effect on the level of budgetary risk endured. Making them act as merely a mean to control and monitor behavior in the long run.





- *Figure 13.1 The impact of the Municipality B' control components on the level of budgetary risk created*

In sum, the dependency on enrollments together with the adjustment of the spending frame places at the outset a relative high level of budgetary risk upon the management. This is even enlarged by the decision to allocate special needs educational funds based on addresses and not actual enrollments. Likewise as described above the home-district suffers great risk, in that, the liable district from a budgetary perspective may not be the key decision-maker for parts of their own budget. Yet, the decision to retain the full budgetary responsibility for all severe special needs services at the administrative level reduces heavily this level of risk. All in all, making the overall budgetary risk only somewhat high. The model is therefore positioned on the right hand side of the risk spectrum though not close the extreme end.

### 13.3. LEVEL OF COMPETITIVE PRESSURE

The rather substantial payment which Municipality B' model attaches to each pupil enrolled means that the districts have a strong budgetary incentive to focus on upholding enrollment levels. When combined with the presence of a market consisting of both public and private providers the substantial amount attached to each pupil should in principle create the conditions for a competitive market for education services. The individual district is from a political point of view encouraged to develop clear education profiles and the devolvement of funds is here seen as a vital tool which may enable the creation of services in tune with user' demand. Together with the publication of education results these decisions are intended to encourage local focus on high enrollments.

Moreover, a direct budgetary link between upholding enrollment levels in the public school and countering private school competition is created by the model, in that, school districts are allotted an extra payment for each pupil enrolled from March to September coming from a private or a public school in another municipality. The payment of 35,000 DDK attached to each extra pupil enrolled during this period thus gives the public schools a clear budgetary reason to focus on taking back pupils from the private schools. On the other hand districts must reimburse a payment of 35,000 DDK to the administration if a child over the course of this period leaves in favour of a private provider. Although the payment is approximately 8,000 DDK less than if the child had been enrolled March 1<sup>st</sup> this case payment inspired approach accordingly, as visualized in Figure 13.2, affects the competitive pressure

brought upon the public providers, giving them strong incentives to counter private school competition.

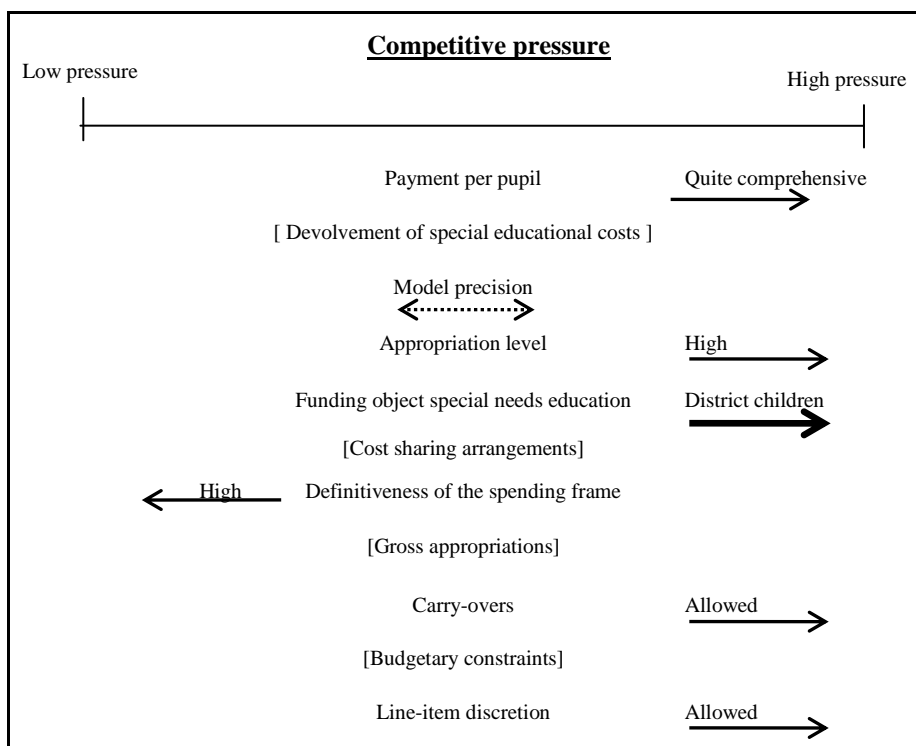
As for public school competition the direct link between enrollment and local budgets is weakened by the fact that the budgetary effect associated with specific enrollment changes is postponed completely to the following budget cycle. This is the case if a school attracts respectively 'looses' a pupil to another public school in the municipality. Likewise, if private enrollment changes take place outside the period from March to September. This capitation inspired approach may affect the short-term intensity by which additional enrollments are sought, not at least as all needs associated with new enrollments must be covered within the fixed budget. The actual needs associated with a particular pupil may thus come in to play affecting the efforts invested in pursuing extra enrollments, in particular of pupils with known special needs. The public school related competition is therefore relative low and combined with the fact that the allocation of special educational funds is also independent of actual needs, these factors, at the outset, decrease the competitive pressure as so far of public school related competition.

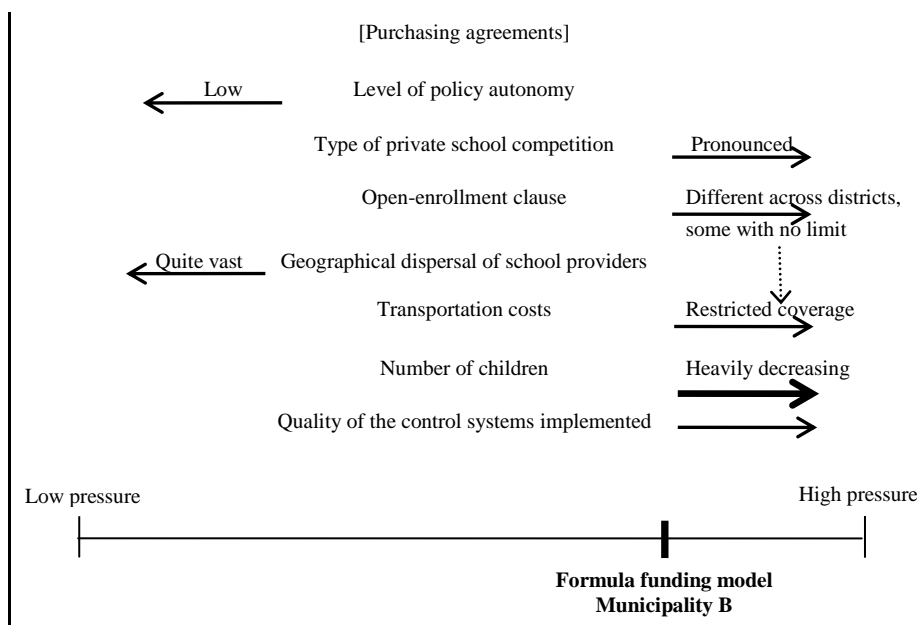
This is however countered by the choice of funding object, which increases the competitive pressure. Since special educational funds are allotted based on addresses and not enrollments the home-district must cover the cost of all special educational services given to children living in the district. This gives a clear budgetary incentive for a district to ensure that as many pupils belonging to the district as possible are enrolled in the local school, even so if the new enrollment is not immediately compensated with an extra payment. This is especially so, since enrollments make the management the key-decision-maker for deciding what services are to be given to the child. The separation of education and budgetary responsibilities for those enrolled outside the home-district can as well make it desirable to enroll pupils from other districts, in that, the budgetary responsibility for special educational services is held elsewhere. The district thus incurs no financial liabilities associated with having enrolled a non-district pupil, at least if the cost paid by the other district covers the actual cost of including the pupil in local services. Likewise when enrolling pupils with severe needs in that the budgetary responsibility for all special needs education is here either held by the home-district school or the administration. The choice of funding object thus affects heavily the level of competitive pressure created.

The geographical placement of public and private schools means that competition is not confined solely to larger town environments. The competitive situation is present everywhere and the individual public school can almost by default not expect that a pupil will de-select a private school or another pupil school for that matter. As for public school related competition the districts have been given free rein over their local enrollment guidelines. This has resulted in different policies for how many non-district pupils are allowed to enroll above the official class rate of 24 per class. Below 24 a full competitive market exists for those willing and able to pay the cost

of transportation. Above, districts are only able to enroll home-district pupils as these are not subjected to the clause, thereby making the only competitive target the number of home-district pupils enrolled elsewhere. The publication of education related results may here increase the competitive pressure, whilst the decision only to reimburse transportation costs for pupils enrolled in a home-district department or in special schools restrict the actual free choice, thus limiting the pressure created.

From the perspective of the private providers the case payment attached to each pupil enrolled gives a continuous budgetary reason for upholding high enrollment levels. The competition created from the private schools is substantial with 33% of the pupils in Municipality B enrolled with private providers. This is even so although some of these schools cater only to specific segments; either in the form of pupils with special needs or pupils seeking a more religious foundation for their schooling. Five out of the six private schools are further one-entry schools, giving them only a limited number of seats available. The last private school is however very large with up to 4 class tracks on each grade level. All in all, this means that the competitive pressure stems mainly from the private schools, albeit the choice of funding object also encourages public-driven competition. Again though, it is important to note that the public schools feel themselves to be competing on uneven ground when it comes to private school competition. This may make the perceived pressure seem even higher.





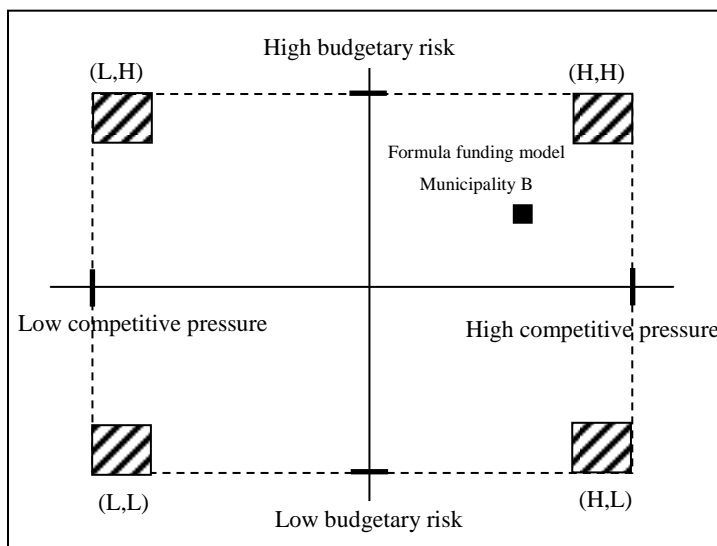
- Figure 13.2 The impact of the Municipality B' control components on the level of competitive pressure created

In sum, the control components create oppositely directed incentives. Four decisions however are important for determining the actual level of competitive pressure, namely the private school competition, the relative substantial amount attached to each pupil enrolled, the choice of funding object for special educational funds and finally not at least the general drop in pupil numbers. The on-going drop in pupil numbers may indeed overturn the otherwise incentives, making it desirable from a more long-term budgetary perspective to enroll additional pupils. Even if these are not immediately compensated. All together these components make the competitive pressure relative high. Although not the far right-end as not all enrollment changes are taken into account.

#### 13.4. MANAGERIAL PRACTICE – FAIRLY HIGH BUDGETARY RISK/RELATIVE HIGH COMPETITIVE PRESSURE

The above analysis means that the funding model is placed in the upper right quadrant of Figure 13.3; a placement which reflects the combination of a fairly high level of budgetary risk and a slightly higher level of competitive pressure. The following section discusses the managerial practice created in the light of the model's incentive structures. The main points, in this context, are the choice of funding object and the division of budgetary authority for special needs education. The bounded scope of enrollment-related adjustments further means that this part of the allocation comes to be based on a sort of expectation of outputs, inverting some of the intended

incentives. The base incentive for productivity, through increased output levels, may for example be hampered. Further, the construction also brings along the possibility that the municipality may be exposed to adverse behavioral responses associated with both types of payments, possibly without the associated benefits of case payments. In the search for efficient use of funds this is of course problematic.



- Figure 13.3 Managerial practice, Municipality B, created through the combination of a relative high budgetary risk and a relative high competitive pressure

The fairly high budgetary risk combined with the relative high competitive pressure created by the model brings with it a strong incentive for the districts to uphold a high productivity level. This is not at least spurred along by the substantial payment attached to each pupil enrolled as well as the choice of funding object for the allocation of special educational services. Albeit the decision to compensate only particular enrollment changes in principle may affect the short-run motivation for enrolling a pupil, the separation of budgetary and education-related decision-making may more than counter this. The districts are thus given a continuous incentive to uphold enrollments by seeking to attract pupils enrolled in both private and other public schools. The quality of service is in this context a vital managerial mean to uphold high enrollment levels, making high quality of service important from both a competitive and budgetary perspective. This may motivate the management to seek to 'commercialize' their services in order to appeal to potential users.

The fairly high level of budgetary risk also brings with it the need to ensure that the service delivery is characterized by cost-effectiveness. The incentive for creating an efficient use of funds is enforced by the fact that the preliminary spending frame is adjusted in September. Albeit only some enrollment changes are considered the

management must take this into account in their planning. In turn prompting the management to act more prudently and not spent, allocate or earmark all funds up front. The ability to predict/control enrollments thus becomes important for how reliable the preliminary spending frame actually is. The fairly high level of budgetary risk brings with a range of incentives intended to encourage a prudent use of funds, not at least reinforce by the fact that districts are allowed to bring forward full surpluses. The soft budgetary constraints may however modify the continuous focus to keep within the budget.

As parts of the model in connection to efficiency are based on capitation payments the most likely response will be that of focusing on attempts to lower total costs. This is especially the case in terms of funds allocated for inclusive-seeking services and special needs education. The basic idea is that the management through the devolvement will (re)include pupils in the general environment, as this gives them a greater level of freedom over how funds are to be spent. The fairly high budgetary risk precipitates this, further inducing the management not to over-spend. In turn tailor-made solutions are expected to be created in response to the fixed nature of the allocated budget. The hope is that the future guideline for when and in what circumstances help is to be given will be the needs of the pupils. This is in contrast to the previous applied strict system where a pupil based on diagnoses (which could be quite delayed) was allotted a fixed number of extra support lessons. Successful inclusion will thus entail that the management can retain the pupil dependent allotment within the district. The general idea behind the devolvement of special needs funds is to link budgetary and education-related responsibilities. By being accountable for a larger part of the funds the management is expected to be incentivized to utilize funds more appropriately, as they are now accountable for its use. Further giving them a direct incentive to (re)include pupils in the general environment thus enhancing their own discretion over how funds are to be spent. Not only will successful inclusion mean that the district keeps the pupil dependent allotment but it also retains full control over the associated funds for special needs services. Thus, if a district is able to create sound educational environments where inclusion can take place the needs of the pupils will be better, while also creating a more solid budgetary base thereby decreasing the immediate budgetary risk.

Adversely, the focus on lowering total cost may bring with it the incentives to depress services. For the inclusive services the danger is that the needs of the pupils is not sufficiently met due to the restricting nature of the fixed budget. This is especially prevalent for services such as additional support and group-integrated services as these no longer are classified as special needs education making it more difficult to control whether children are receiving the needed help. Depressing of services may also take place in relation to pupils in special needs classes, in that, the management in the pursuit of a larger, stable budget base could be induced to refrain from referring pupils to the externally supplied services due to the associated cost. Instead of acquiring external services the management may decide to keep the child, thereby



retaining full decision-making freedom over the funds. As discussed such behavior is beneficial if similar services can be created through the larger budget base. If however the needs of the pupils are not sufficiently met this becomes adverse in nature. The ban on creating local special needs classes also play a role in that it may increase the likelihood that funds intended for the establishment of inclusive-enhancing services in the local environment is actually used for other purposes. For example on acquiring special needs services elsewhere, thus decreasing the amount available for inclusion in the general environment.

Moreover, the model may lead to a shifting of user' cost and not at least up-coding. This is connected to the choice of funding object and the division of budgetary responsibilities. The latter, which makes the administration responsible for all externally supplied special needs education, may motive up-coding behavior in that the management can lessen the immediate budgetary risk placed upon them, if succeeding to refer a child to such services. Although the specific referrals are decided by the Referring Committee the 'enrollment principal' still holds an important position, in that, he/she holds the authority of recommendation. Thus, if the principal can argue for the appropriateness of referring, the financial responsibility shifts to the administration. Creating a direct connection between up-coding and a potentially sounder budgetary base and a lower level of budgetary risk. The same is true for the less comprehensive special educational services if the particular child in need comes from another district. The decision-making power for assigning this type of support is in this situation held solely by the 'enrollment-principal' while the cost is paid by the home-district. Because support is increasingly given to the group, and not the specific child, this may even buttress further the incentive to allot support to these children. Thus, although the capitation payment inspired approach at the outset makes up-coding difficult, the potential separation introduced by the division of responsibility creates incentives for up-coding.

The incentive for up-coding pupils to services where the budgetary responsibility is held by the administration exists regardless of whether the child is enrolled in the home-district or not. As long as the cost associated with a child being included in the general environment or in a special needs class is perceived to be too great, the home-district school as well as the 'enrollment school' will have an incentive to seek an up-coding of needs. If 'successful', the 'enrollment-school' namely only stands to lose the pupil dependent allotment, which from a cost perspective may be low compared to the actual cost. At the same time, the home-district avoids paying the cost of any special needs services given to the child while even retaining the payments  $p_1$  and  $p_3$  due to the fact that the child lives in the district. For both schools a successful referral is thus attractive from a budgetary point of view. Further if the referral happens after the setting of the spending frame they even keep the pupil dependent allotment. Adverse behavioral responses may thus affect the overall efficiency of how funds are used risking thus that it is not the needs of the pupils which determines the type of services given.

The division of budgetary responsibilities may further slow down the efforts taken by the management in terms of inclusion and appropriate support. The scaling-down of services is complicated as it may entail a transfer of responsibilities from the administration to the home-district. This may for example happen if a child no longer needs the services provided in a special needs school but can be sufficiently helped in a special needs class. Giving therefore the home-district schools few incentives for making such scaling-down-decisions. Thus, albeit the combination of budgetary risk and competition strongly incentivizes prudent and efficient use of funds the magnitude of risk may be so great that the mentioned adverse behavioral responses may occur. Engaging in such behavior will namely not only reduce the budgetary risk, but also be a mean to improve the general competitiveness of the district. The perceived risk may further be larger as the public providers feel themselves unable to freely respond to competition from private providers, engaging in cream-skimming behavior. Again affecting heavily the ability of local providers to create prudent and efficient service delivery.

## CHAPTER 14. PRACTICING SCHOOL MANAGEMENT IN MUNICIPALITY B

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### 14.1. INTRODUCTION

“I’m for sure an actor on a market, that’s why I’m very focused on market the school, being aware of only selling something I can vouch for”

So does the principal of District W describe her role as a principal of school (I J lin.760). Part IV has until now analyzed the theoretical implications of Municipality B’ funding model on managerial practice. In the light of this, Chapter 14 presents an account of how school management is actually practiced. The account focuses on the guiding principles affecting the management and seeks therefore to visualize how education concerns are weighted against the model’s incentive structures. In the final part the managerial practice is compared with the political objectives, opening up for a discussion of whether the created practice is in line with these objectives.

### 14.2. EDUCATIONAL BRANDING AND ENROLLMENTS

The competitive situation in which the schools find themselves fuels a focus on high enrollments, District W’ principal stresses, as this is an important indicator of quality: *“it’s a very crucial measure of quality, knowing who are punching out and why? Is it because they’re moving away or are they displeased?”* (I J lin.174), it is in other words a *“measure of satisfaction and quality; are the parents happy, are the children?”* (I J lin.206). Countering private school competition, the afterschool head in District Z emphasizes, is of special importance and *“collectively as schools we agree that we need to focus on how to take back our children from the private schools. We do this in different ways, with our different profiles – what is it we want to be known for?”* (I L lin.722). Politically, she notes, each school has been encouraged to: *“develop a strong profile so that parents have the opportunity to choose your school”* (I L lin.755).

Branding, the financial employee emphasizes, is an ingrained part of a pupil dependent model, in that, it must be: *“profitable [for the schools] to be visible and market themselves and of course deliver a sound quality - branding without quality is obviously not enough”* (I O lin.60). As a part of these efforts, the principal of District Z explains, the management focuses on creating clear guidelines, describing for example the *“pedagogic we’re aspiring to; we apply different teaching methods in the older classes too – that is, making clear statements, establishing a sort of profile”* (I K lin. 629). Having a clear education profile with an overall pedagogy shared by the both the school and the afterschool services is a vital mean to make the school stand out in the eyes of the parents:

“We want to be a school with a unified pedagogy, which is visible, giving us a ‘shared’ language. I expect it will create a spillover effect on how we get on with each other. In turn I hope the parents will say: ‘Yes! They’ve actually thought about this, rather than it being just haphazardly attempts’ – I expect it to become our trademark” (I K lin.156ff)

By having a clear pedagogical profile the school can elucidate what private schools are not providing, District W’ principal explains. For example telling parents about the staffed homework-café, in general accentuating the broader afterschool services available, because: *“in a private school, pupils go home at 1 or 2 o’clock and then they’re home alone all day, because there is no after-school offer. But with me there is”* (I J lin.815). Likewise, District Z principal notes, *our afterschool care has a sport profile, and this we stress at every given opportunity* (I K lin.632). In this way seeking to verbalize that parents by choosing them, not only; *“get a better after-school service but also free-schooling, which some already have witnessed is at least of the same quality”* (I J lin.818).

In the attempt to ensure that the home-school is picked in the first place partnerships with the kindergartens are established the head of after-school care explains: *“Our ‘bridge building’ with the kindergartens is gold; because it’s with them the good stories must start. They’re the first step towards we becoming a success or a failure; because it’s here you decide whether to choose us or a private school”* (I L lin.436ff.). These partnerships, District W’ principal explains, provide opportunities for the children to meet the teachers, to get to play on the playground and in general become familiar with the school. In turn, making it self-evident for the child to follow friends to the school. Thus; *you have to be a tough cookie if as a parent you say: ‘no it isn’t important that my child goes to a place with familiar adults, I rather uproot it and enroll it where it doesn’t know anybody”* (I J lin.850ff). New organizational models such as ‘flexible’ and ‘age mixed’ school start are further to make: *“the de-selection of the public school even harder compared to today where parents make the decision without ever having set foot in the school”* (I J lin.837).

Being accessible and telling the good stories is also crucial, District Z’ principal explains, and albeit it can be time-consuming, being proactive, taking the time to hear the concerns expressed by the parents, is all important in defusing potential conflicts. Simultaneously, it also brings with it opportunities for once again making parents aware of the practices and mindset of the school: *“it’s worth having them say, ‘well I can always take it up with the principal; she’s always available’. I participate in all meetings around school start; explaining who we are, verbalizing that we do a proper pedagogical and educational piece of work”* (I K lin.613ff.). Getting the good stories out in the media is further vital and with the new ‘Children Villages’, communication becomes more important than ever, District Z’ principal notes. Leading them even to consider if they should hire a person to handle the communication aspect of branding: *“we’ve gone so far to seriously consider whether we can*

*afford this, given that we have a person on the board who we could hire 5 hours per week. We probably can't, but we're very aware of its importance* (I K lin.622).

In the focus on enrollments an essential aspect is ensuring that pupils remain until the end of 9<sup>th</sup> grade. Traditions on boarding and private schools however are particularly hard to break. Yet, as the older pupils are now gathered in the town departments sort of “*junior high – youth environments*” have been created; giving the young people an ‘*aha experience*’ otherwise only associated with the start of further education thus making the public school more attractive (I J lin.944). The range of electives has further been widened with the merger of schools rendering also possible that specialized subjects are taught by teachers with subject-specific skills (I O.723). Motivating schools to develop attractive schooling for older pupils, the financial employee stresses, is a clear municipal strategy, which focuses on “*bringing together incentives by saying ‘if you want a lot of money to make an exciting school for the older pupils, you need to make sure you have a lot of pupils’*” (I O lin.196).

The teachers play an important role in retaining and attracting pupils. Although high class averages from the perspective of the teachers is a complex issue, their mindset, a department head from District W notes, is slowly changing: “*All haven't fundamentally understood it yet, but most have...in the olden days there was always opposition when a new child arrived: ‘No, must we have a new kid’. It isn't so today, but back then 25 years ago it was a huge problem...today it's almost a gift*”(I I lin.582ff.). Old patterns however are hard to break the financial employee notes:

“Pupils and their parents are of course free to choose whether a boarding school is the right choice. But there is no reason for us to encourage them to do so. We've actually had examples where the management had to tell teachers to refrain from tapping pupils on the shoulder, asking if they aren't contemplating [a boarding school], either because they're fed up with them or so on. That just doesn't work, because it's simply draining funds right out the system and funds equal opportunities!”(I O lin.778ff.).

The competitive situation further brings with it new challenges, District W' department head explains, e.g. in relation to how the increased choice of schools is used:

“The challenge is pupils dripping around, go shopping from one district to the next, often carrying a lot of baggage with them. I strongly feel that if we had the opportunity, we could put a stop to this, because it isn't in the interest of the child – thinking that problems can be solved better elsewhere. We would be very interested in working together, securing that the child remains where it is.” (I I lin.444ff)

Unity and co-operation is however difficult and not naturally created in situations of great competition. The dilemma, District W' principal explains, is “*how can we help, and share knowledge and simultaneously uphold some business secrets?*”(I J

lin.890). For her the dilemma was once manifested when she, along with the other schools, was invited to a meeting discussing a talent program with the local gymnasium. No one but her showed up and, she explains; *“I have to admit, I asked no one else if they wanted to join, because it’s a sales point, I want the best ‘out-schooling’”* (I J lin.891). When however the local private school became interested she contacted one of the other public schools, because: *“It isn’t good if [name of the private school] gets it and they don’t. So now we’re two schools offering it. Actually I thought ‘oh well the geographical distance means that we’re not really in competition anyway’. But as for the rest they don’t have to join in for my sake”* (I J lin.909 ff.). The management, District Z’ head of afterschool care explains, is walking on a tightrope: *“competing over pupils, simultaneously being careful not to steal or profit on the expense of others. It’s a balancing act. But there isn’t any doubt that we try to tell the good stories so that they hopefully will come to us”* (I L lin.710). Therefore, District W’ principal notes, the management must themselves also be managed:

“We try talking about them as *our* children, but there is a risk of sub-optimization. So management of the principals is required. They have to managing us as a team, challenging us – are we doing this for personal gain or for the rest as well? Because you can of course always argue that ‘it’s better that they enroll with me than with a private school’ – but that is somewhat a little pseudo argument” (I J lin.916ff.).

### 14.3. MANAGING UNCERTANTY – ESTIMATIONS & RESTRAINT

Besides being an indicator of quality, enrollment changes are also important due to their effect on the spending frame available by September. This prompts a focus on enrollments as a mean also to ensure a stable, sound base for planning and staffing. For District W’ principal, this entails being briefed when a pupil considers leaving the school: *“For me it’s crucial that it doesn’t come as a surprise that we’ll be 10 pupils less. Thus, we must be proactive towards the older pupils and their parents; how far are you in your plans? Creating a clearer picture of where we stand”* (I J lin.162ff). With imprecise estimations comes namely the danger of overstaffing magnifying the associated backlash if things go wrong:

“If a principal now is in a situation where he is surprised that there is 10 pupils less than expected, then it’s really difficult to turn things around...When I had to do it here I simply had to lay-off more than was actually the plan, because with periods of notice of 3,6 9 months, it takes most of a year before you finish. You must go further than what an operating situation without a backlog would indicate.” (I J lin.221ff.)

The fact that the funding is based on an average measure of salary, the principal explains, further spurs along the need to be innovative in the utilization of funds.

“We look at the tasks at hand, ensuring firstly that the lessons fit, saying ‘how many man-years do we need at the departments?’ Here we’re faced with a dilemma which isn’t related to the model being so pupil dependent, but rather to the fact, that it’s also build on an average teacher salary. The model clearly states the lessons the particular class is to have, but locally I get the lessons at an average cost, based on the entire municipality. If I have teachers with longer-servings and a higher salary then it is somehow two different calculations; the lessons and the salary bill. These don’t always go together. It’s this jigsaw we try to solve in the spring. We want and must deliver that level of lessons” (I J lin.264ff.).

From the administration’s point of view, the financial employee explains, the main task becomes that of ensuring that precise estimations are used by the schools for planning (I O lin.304). For District W’ principal, the planning process entails setting as precise a budget as possible, remembering to set aside funds for staff related matters such as substitutes. The goal, she explains, is to: *“get estimations which hold up when we enter the accounting year. Maybe not cutting to the bone, but setting a budget which I think will last and will ensure that we aren’t forced to fire people over the course of the year”* (I J lin.214ff). The fact that schools are conservative in the planning: *“expecting 5 pupils more to leave, just in case [the financial employee explains] means that we actually have schools with too many funds set aside. We’ve a couple of schools with too much money in the bank”* (I O lin.203ff). Although the new district structure at first affected the ability of the management to predict enrollment changes (I J lin.210 DW), the larger entities together with the devolvement of funds have prompted better resource utilization, the municipal manager notes. The larger units reduce fluctuations across years: *“but I have to say that larger units are a precondition; otherwise there is too much money which doesn’t come into play. You can say it’s a downside of decentralization; it creates a lot of small pockets in which funds can be set aside”* (I N lin.266).

Because there is no limit on how much funds the individual district is allowed to carry forward, large amounts have at times been brought forward. This, the department head of District Z emphasizes, is problematic because they should in principle be spent on the children for whom they were intended. If not they should at least be earmarked to for example a: *“playground, but then you must also act accordingly. Because this is the whole idea behind devolving funds, that they must be used this year, on these pupils and these employees”* (I L lin.258ff). As a result, the financial employee explains, the challenge left at the hand of the local management becomes that of finding the correct level of staffing:

“firing is very expensive, there are periods of notice, hearings, holiday pays and so on...it’s just so vital that they aren’t hiring too many, actually it’s almost better if they are a bit on the lower side and then find a young person who can help them as a substitute if necessary. However you should not consistently underbudget the size of staff because it’s nei-

ther prudent practice to be in a constant shortfall, then you should probably just hire that extra teacher” (I O lin.304ff.).

In District W, the department head explains, a top priority has been to utilize the staff already employed (I I lin.283). An important aspect, District Z’ principal emphasizes, is to make sure that *“teachers are actually giving the required class hours; that they [the teacher’s working hours] don’t become blurred in all sorts of other activities”* (I K lin.44). The teachers are further obliged to cover ‘planned’ or absence due to sickness if possible (I K lin.52). In this context, the department head from District W explains, the use of substitutes for ‘planned’ absence, where the teacher is out of the school receiving training or participating in school trips, is a prominent focus point (I I lin.77). The development of ‘flexible planning’, which brings with it different schedules from week-to-week, is here a vital tool to reduce planned absence. On top of the educational advantages associated with being able to establish condensed project weeks, flexible planning has in District W reduced the use of external substitutes substantially (I I lin. 123).

The funding model brings with it another challenge in relation to the number of man years set aside for management in the allocation. The district as a whole, District W’ principal explains, is allotted only 3.4 man years. But with four members on the management team she herself has to teach an elective- Albeit this subject is not normally offered in the public school and therefore can be used positively in the promotion of the ‘out-schooling’ it takes time away from her main task as a principal, and this is worrisome: *“I’m not sure it provides better quality management wise or educationally for that matter. I think it’s fun and I want to do it. But I’m not sure I actually become a better leader by not doing it full-time. Not being accessible at all times because I’m teaching”* (I J lin. 390ff). The teachers, District Z’ principal explains, are further slowly becoming aware of the tight financial situation and this affects the way they approach her with new ideas. Illustrated for example in a situation during the spring where the physics teachers came to her with a proposal for new needed books; *“which hadn’t been affordable. But they’d figured out that if they were frugal, with a small contribution from me, they would be able to buy one set now and the other next year, and then, ‘maybe in 3 years they would have enough for a book’”* (I K lin.502ff) and because the school at the time had some unspent funds set aside she decided to respond favorable to the request. Overall, it is essential to be aware of what is in effect driving cost, District W’ principal stresses, and albeit *“firing is never easy”* staff constitutes the main driver. Thus, *“I always become a ‘bit’, when other municipalities’ principals say they can’t afford school camps. It’s not these 900-, pr. pupil which is expensive, it’s the employees. But it’s always these 900-, which are axed”*. This is problematic, she emphasizes: *“apropos of what’s understood as quality, then school camps are valuable. Objectively it might seem a bit laughable, my god its only two weeks out of a 10 year school process, but what is it you remember yourself? It’s these camps”* (I J 1085ff).



#### 14.4. RETHINKING SCHOOLING IN A POLITICAL ENVIRONMENT

Political decision-making, District Z' principal explains, affects the content of and the setting in which teaching is given. IT is an especially illustrative example of how politicians have; *"set the agenda, almost unconsciously, that we must have more IT, and wupti wupti we all have IT. It's a huge expense and all classes now have new E-boards"*. Such swift decisions, she notes, have *"major spill-over effects on our core service, and I'm not completely sure that it has been thoroughly thought through, how huge this revolution actually is"* (I K lin.676). With the wish to integrate more IT into the teaching comes namely a range of implicit changes of how teaching is to be conducted affecting not only the content of the teaching but also the teachers:

"Suddenly all employees are handed out computers and expected to teach using an interactive whiteboard. This is some demand. There's Mrs. Jensen who, within memory of man, has had the most beautiful handwriting and now she has no black board, but a pen for an interactive board...I think this will have a much larger effect than expected"(I K 685)

Another example of how political decisions influence the situation is the introduction of district management. At the one hand, the decision-making scope brought forward is widened. The drawback however is that of being also responsible for smaller departments, which due to their geographical location are rarely self-financing (I J lin.367ff). This creates a dilemma, the department head from District W explains, because subsidizing the smaller departments is not a viable long-term solution; *"Simultaneously however, we can't leave them behind. We have to make sure they work"* (I I lin.175). Thus, the principal of District W explains, where the prior model, compensating the schools for the number of classes established, also gave preferential treatment to smaller schools, district management now means that this decision is placed locally:

The bigger departments with larger class averages do finance the ones with lower. This was also so before. But then it was just individual schools and I never saw the money, because they were allotted by the administration. Now I have them and I've to distribute them further until we adapt to the new structure by e.g. co-teaching across year groups. We do this for educational but also for control-related reasons (I J lin.137ff.).

Albeit district management has opened up for teachers teaching in more departments, the drop in pupil numbers, the principal continues, may imply that such measures are not sufficient: *"the long-term quality is threatened. I can say that they [the teachers] must teach there one lesson three times a week and then drive back. I can do that, it's my right. But it just doesn't add up. It'll be more expensive and of inferior quality"* (I K lin.535). The lower pupil numbers, the financial employee concurs, constitute a vast challenge, manifested especially in the efficiency by which the existing building stock can be run. The fixed expenses tied up in buildings,

cleaning and management remain the same, she notes, regardless of pupil numbers: *“the proportion of fixed costs makes up an ever more vast part of the cost pr. pupil...we’ve a lot tied up in buildings, dead money we call it, as it’s not necessarily something from which the individual child benefits* (I O lin.427). With the strong political desire to continue offering local services, in times of dropping pupils numbers, this become problematic, District Z’ principal explains: *“how can we give them something which approximately correspond to decent teaching and gives scope for social leeway? My god it’s 40 children in total across 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade, how exciting to be a teenager!* (I K lin.530). Because enrollments are not always easily influenced the quality of service delivered can come to depend on the geographical placement of the school:

“You aren’t always in a situation where you can affect enrollments...thus we can end up in a situation where we have really, really different conditions – which I’m not a big fan of – where if I’m really clever I can pinch pupils. For me this isn’t what public schooling is about... Home addresses shouldn’t matter; local touches are of course okay. But when it comes to lessons, then it’s something which I don’t think should be different, but it’s becoming a reality and that is why I focus on saying: ‘okay, which clever pedagogical solutions can we make?’”(K lin.194ff).

For District Z’ principal it is however clear that decisions on school closure are political; *“It’s not for me to decide. I can present the hard facts and I do this to the school board by saying: ‘we have a bottle neck and here is the problem’. I can come up with suggestions and then it’s for the political system to decide”* (I K lin. 789). School closure, the head of after-school care notes, is a contentious issue which requires political courage: *“My hope was that they, this time around, would have drawn the conclusion and closed the schools needed, instead of applying the ‘salami technique’...instead we’re now slowly killing ourselves”* (I L lin. 773). Similar concerns are raised by the financial employee:

“There are many feelings involved and it takes a lot of guts to make such decisions, because it’s almost easier to say; ‘okay then, we’ll leave it as it is’. This will give you many pats on the back; ‘Yes, you have listened to the communities ect.’ It takes courage to look ahead saying: ‘well with the pupil numbers we have this isn’t realistic’”(I O lin.626ff)

As a result, the principal of District W explains, it becomes essential to make the problem areas visible to the management team and although the departments are to be understood as a unified whole a valuable tool is to make separate department accounts. These not only elucidate the problems, but the surrounding discussions may create a common understanding of the challenges facing the district: *“I meet with them on a regular basis in order to stress that we’re one school. We can’t have one department consuming all resources. We keep emphasizing this and I challenge the local heads on why pupils are leaving* (I J lin.424ff.). Having the support of the

school board is in this context of utmost importance for District Z' principal and: *"luckily the school board is sympathetic to the fact that it's a business enterprise we're running; one school. If one department is not financially viable the other one will not be either* (I K lin. 528ff.). Establishing the sense of a unified school is however a longitudinal process requiring the merger of different cultures and traditions; *"There's so much tradition, culture and feelings"* District Z' principal explains *"and how is the town to survive if it doesn't have a local school?"* (I K lin.526).

Class-sizes, District W' principal explains, are here important and the main way: *"in which we can make the most out of our funds"* (I J lin.310). These efforts are spurred along by the decreasing pupil numbers, bringing with it a more long-term focus; *"it's about looking ahead. Seeing how we can make it work now, but also how do we think things will look next year?"* (I J lin.324). At times, pedagogical concerns however trump. Following the merger the new 9<sup>th</sup> grades for example remained untouched: *"we thought, or the school board decided, that because of the upcoming finals educational concerns weighted more heavy. But we did this with open eyes, knowing that it costs 1½ full-time position"* (I J lin.314). Geographical concerns may though act as a barrier for establishing efficient class sizes: *If I should optimize fully, then I would be forced to move kids from one department to another, and this, parents aren't keen about. So there are limits to how far optimizations can go on the specific class level."* The management is thus faced with the choice; retain the pupil at the expense of inefficient class averages:

"I might be able to say: 'well let's just make one class'. This would be the least extensive, and I might have to move 5 children each year to the other department. In my opinion this would mean that some would de-select the school, and I would afterall rather have them with me. Again I'm dependent on pupil numbers, so as long as they are retained in my fold I'll have more freedom. If they enroll in another public or private school I reduce my own scope, so it becomes a tradeoff" (I J lin.363ff.)

Since pupil numbers decrease across classes and grade levels the efforts are complicated. New ways of thinking about classes and teaching, moving away from traditional age-based classes, District W' principal notes, are thus needed:

"Our focus is on looking across grade levels. An example: I have roughly 30 kids on each grade level in [name of the department] this is a rotten number. It's too much for one class and far too little for two. Well it's not way too much it's too much the gap up to 44 where it balances is too wide. But instead if I look at 0,1<sup>st</sup>, 2<sup>nd</sup> together I have 100 pupils. Right now I have roughly 6 classes, which is far too costly, but looking across I would be able to make 4 appropriate groups" (I J lin.339ff.)

Albeit such initiatives cannot be established as permanent classes there is a political acceptance for making such arrangement on a more loosely basis combining it also

with other initiatives such as ‘rolling school-start’. Educationally however these initiatives constitute a complete paradigm shift in the teachers’ methodology: *“because when a pupil starts at the age of 6 you aren’t able to say: ‘today we all learn about the letter A’. Because there might sit an eight-year-old who is reading Harry Potter”* (I J lin.856). Because such initiatives furthermore can create problems when channeling children into the middle’ school grades the principal of District Z contemplates handing in an application for a continuation of the division; *“it could solve the problems of class-sizes, but also we think it will be profitable educationally for the children, being together with someone who is just a tad further, isn’t as old or gifted”* (I K lin.257ff). Albeit mainly used in the smaller departments the decrease in pupil numbers, District W’ principal notes, even spurs along such initiatives in the larger departments making the changes somewhat driven; *“on the grounds of finances. But it’s not only budgetary driven, because we also find it interesting from an educational perspective: what happens when we have kids at the age of 6 and 8 in the same group, are they able to learn from each other?”* (I J lin. 353).

The introduction of ‘Children Villages’ constitutes a new opportunity to counter the effects of decreasing pupil numbers. But with it also comes a necessity to rethink services establishing a closer co-operation between day-care and schools and the different professions employed here. Locating the daycare and kindergarten facilities in the same buildings as the school and after school services the Children Villages, the sector head explains, bring along the opportunity for *“the specialized and general environment [to be] located in the same cadastre, with a management team responsible for all children* (I M lin.328) and with the children enrolled into: *a sort of unbroken process which will make the selection of the public school natural and the choice of a private school that more difficult. We create this cohesion from which it is difficult to break out”* (I M lin.390). Locally, the head of afterschool service explains, these new initiatives are eagerly awaited:

It’s important for the smaller kids to be close to their home-environment, so it makes sense to have 0,1<sup>st</sup>, 2<sup>nd</sup> in [department name]. Our challenge is to create sound services because this isn’t the case if we have just one class in a ‘ghost school’. So could we imagine it being placed in the afterschool-building with the rest of the buildings sold off? Or could we imagine taking the group, which almost makes up a class, placing them in the preschool class room? I don’t know, but we’re busy, trying to come up with innovative ideas (I L lin.789ff.).

## 14.5. INCLUSION – A CHANGE IN MINDSET

Creating teaching environments which are educationally and socially inclusive is a top priority, District Z’ head of afterschool care notes. Successful inclusion however requires a unified pedagogy and a new mindset affecting the approach taken towards children and their parents; *“We speak about them in a more inclusive manner.*

*There's still some way to go before all employees get past the story about: 'her brother was also like that, and moreover I think and so on', all these 'I feel' and 'I think' (I L lin.474).* Successful inclusion, the department head from District W concurs, to a great extent comes down to how children are approached and the type of co-operation created with the parents: *"rather than just coming up with a number of hours of support. The mechanism is always the same; it sounds like any of the 5 worst in any class, when a boy is said to need extra support" (I I lin.381ff.).* As a result the management themselves have been instrumental in needs being upheld and with it for how support was given. Creating expectations among parents, like: *"if Oliver gets this type of support or an IT-backpack all problems will be solved. Instead of looking at Oliver in a different light, perhaps demanding something from how he behaves" (I I lin.405),* support had become a sort of quick-fix solution:

"The culture was that the second someone was perceived to be taxing support was needed and all would be fine. Thus, you create need, often completely unreflective and without moving anything at all...I've noticed a certain up-keeping of problems, where instead of challenging the children, they are shielded off from 'what they are not'...of course there are children where it's an irreconcilable task [including them in the general environment]. But I think much support would be superfluous if we just looked differently at the pupils' problems. There are many self-fulfilling prophecies where the need is almost self-created" (I I lin.409ff.)

Changing the mindset on inclusion and of how needs are most appropriately met has been a vital municipal concern, the sector head explains, and the intention has been to say: *"some kids may face more challenges than others, but they're completely normal children, and this we must be able to handle in the general environment by for example having pedagogues with motion, movements and speech skills, you name it" (I M.136).* Inclusion thus inverts the process, the municipal manager explains, requiring the starting point to be that of *"not sending pupils away, but 'what can we do locally to succeed?'" (I N.91).* Inclusion is thus closely linked to education quality, in that, inclusion ensures that the education is given; *"as close to the general environment of the child as possible, both geographically but also functionally. Quality is also the creation of learning environments where differences are appreciated" (I N.198).* The latter is important, she stresses, because *"if too many different education environments are established where all are alike, a lot more societal and structural problems are likely to be created (I N lin.201ff.).*

The larger financial scope given to the schools has paved way for new solutions to be created and enabled the management to act much faster; a precondition for successful inclusion as noted by the department head from District W: *"because there is no doubt that much exclusion can be avoided if we act in due time and in the right manner (I I lin.361).* Following the legislative amendment, the sector head explains, resources and lessons are no longer so closely tied to the specific child (I M lin. 71ff), which means that support may be used more broadly on the larger group.

Importantly, the municipal manager notes, it is now the responsibility of the management to decide when and how resources are to be spent *“in 6A where Sofia is. And then it’s not because Sofia is there and her mom will not receive a letter saying: ‘Sofia has been allotted 7 lessons of support’.”* Rather a more comprehensive plan must be developed so that the letter instead explains *“that a plan for Sofia has been made and an extra resource has been allotted to Sofia’ group or class, with the overall goal of this or that (I N lin.478ff.).* This, the head of after school care in District Z explains, constitutes a shift in how and when support is given:

*“We’ve inverted it by saying: individual support does not exist, cybernetic pedagogy is out...Support is given to the group, and then the child; opening up for the child to get help when needed. Unless the child is in a wheelchair, blind or deaf, no one needs constant support. The special needs assistant should thus therefore not always be present, giving the child the opportunity to take of this ‘overcoat’. Instead there might be other children in need of help (I L lin.486ff.).*

Diagnoses, District W’ principal notes, are thus no longer decisive factors for support to start, in fact: *“I try short-circuiting the process, saying ‘let’s allocate more resources to the class. It isn’t important whether Victor has ADHD or not.’”* From a parental point of view this may be difficult to understand. Yet, the principal explains:

*“We have done this in relation to pupils with reading and writing disabilities. Prior, our reading instructor thoroughly tested – a precondition for triggering an IT-backpack. Today, all our computers come with a program for children needing things to be read aloud. We never say no, because there’s no reason to do so. If we think it’ll help, then we don’t need a 10 hour reading test. Let’s just test if the kid may profit from the computer. It’s actually cheaper giving them a 3000-, computer than having our reading instructor perform 10 hours of testin followed by a comprehensive program. So it’s about looking at the money, saying: ‘hold on to your coins but let the pennies roll’. A computer is chattels compared to man hours. It’s a constant balance” (I J lin.709ff.).*

Support is instead allotted by the management on a quarterly basis followed by assessments on *“finances, but also in terms of quality and the specific effort. The child may require more help at certain times or situations. Other times they work in ways which reduces this need. In this way it’s closely tied to our objective of a flexible school”* the municipal manager explains (I N lin.478ff.). This approach, District W’ principal notes, has opened up for: *“extra resources to be used in new manners or instead being saved for times where it’s important that Nicklas sits still on his chair. This gives larger flexibility, both in a broader perspective and for the individual team” (I J lin.685ff.).* The devolvement of funds, District Z’ principal explains, has thus been instrumental in shifting the management’s perception of inclusion, yet:

"I think it's a combination. Partly because we've been given wider financial scope but also it's a question of attitude. We've seen a change in leadership on multiple levels parallel with the change in attitude. Several pedagogues and teachers have been trained to make it possible. It has been verbalized that this is what is expected of the public school. So many elements have affected the new mindset and finances are of course one of them" (I K lin.399ff.).

Inclusion, the principal of District W concurs, is not a given with the devolvement of funds, because: *"it's also due to our existing practice; our inclusive and appreciative approach and the fact that our volume is large"* (I J lin.690ff.). Rethinking what support is and where it is to be given is further not a straight forward process, but requires the backing of both teachers and parents. The narrative must be turned around and with it also the way in which the parents are viewed. From seeing them as annoying and loud, the parents, the municipal manager notes, must become an involved part, in that it: *"means a lot in terms of prevention. They must always be included. The plan of action states what the school is to do, what the child is to focus on and how the parents are to support these efforts. Because we can't do it without their support"* (I N lin.520ff.). The parents, the after-school head explains, must in turn let go of the deeply-rooted understanding that diagnoses are triggers of support, thereby decoupling the tight connection between inclusion, support and diagnoses:

"It's a challenge to make parents understand that 'precisely my child with *Asperger's* isn't to be enrolled in a special needs school. I've also sat down with parents who complained: 'he got 12 lessons last year and now he only gets 8'. We need to turn it around, saying 'well the goal is that your child comes to suffice without support... because no parents want their child to be in need for the rest of their life if they in any way can learn to make do without'" (I L lin.482ff.).

The fear of complaints, following the first devolvement of responsibility, has shown itself to be unfounded. Because decisions and dialogues, the municipal manager explains, now take place much closer to the child and parents, these become more involved, compared to: *"before where it was those people at the administration who had decided something. This made it easier to complain. Now it's 'my child's principal, I've been involved and can actually understand the decision and have confidence in it'"* (I N lin.83ff.). As with the children inclusion also entails not focusing exclusively on the parents of the children with special needs. Rather the whole group of parents must be included. Although these do not have a say in whether inclusion is sought for a particular child their concerns must be taken serious, the afterschool head explains. Because if not it can lead to the child being excluded anyway:

"It's extremely important to be aware of things brewing or starting on 'intra'. It must be taken seriously and parents must be contacted immediately so to hear their concerns – which are often well-founded...because

it's important that it's safe to go here. We of course have to explain all the advantages of having these kids here – what they bring, profiting all further in life. My experience is that if we take it seriously they lower their shoulders. But if we don't, they become frustrated and start talking without us...we've been forced to move a child to a special offer because the parent group simply excluded the child and its parents so that we were left with no other choice" (I L lin.601ff.).

Inclusion, District Z' principal explains, is difficult and it is a challenge to make *"diversity and inclusion profitable for all. We still have a tendency to say 'Hugo hit Sofia again, so Hugo must go'. It's an art form to get to where the child can stay part of the class. When they're first there, I don't feel that they are dissociated by the parents* (I K lin.762ff.). Conveying the merits of inclusion to the teachers may be difficult, the municipal manager notes. She is often met with the attitude that inclusion is just a new way of cutting cost: *"then I've to repeat: 'No it's a conscious funding model. We've to be aware of how we spend funds, how they are best used for the kids'. Actually I don't think it's so wrong talking about finances. It's a part of a broader quality debate"* (I N lin.364ff). Teacher support, the head of after-school care stresses, is however all important and entails training and equipping the teachers with the needed competences for meeting a more diverse set of needs: *"I think there will always be teachers and pedagogues saying; 'this is an immeasurable task'. But the question is whether it stems from the child being difficult or from the individual employee not being sufficiently equipped* (I L lin139). In gaining the support of the teachers District Z' principal focuses on making visible the: *"extra resource at the start of the year and then help them organize and use it. This is a great managerial task for our department heads and in the long run I think it will lead to fewer internal referrals"* (I J lin.749ff.). Yet, although two-teacher arrangements and experts with specialized knowledge have consulted the individual teams inclusion, the municipal manager explains, remains a challenge:

*"I acknowledge that resources are under pressure and that we face a vast diversity task, because it's not enough to teach the middle group hoping that the academic talented will find ways to challenge themselves, and the weaker likewise. We must be able to apply differentiated teaching while the funding for the general environment is under pressure...We have to start thinking about learning environments as something else than the traditional class. Otherwise we'll not succeed"* (I N lin.385ff.).

## 14.6. INCLUSION & EXCLUSION – WHERE ARE THE PUPILS?

*"Without doubt it's most advantageous for the home-district to retain their own children. Getting the power over which services are to be provided, but also over the costs"* (I O lin.533). So explicates the financial employee the main rationale behind the decision that the funding object for special educational funds is home-addresses



and not enrollments. Being financial liable for pupils enrolled elsewhere has prompted a focus on ensuring that district pupils enroll in the local school, the department head from District W explains. It has *“opened our eyes to how many pupils are actually receiving services...pupils we didn’t know belonged to our school. You’re mainly preoccupied with those who’re here and not the ones who could have been here”* (I I lin.340). At times, District Z’ principal explains, the management find themselves in situations where they are forced to accept initiatives or referrals without really having a say in the matter. *“If the child isn’t at my school, I have no say at all. It’s difficult when you don’t know the background. So you have to trust others that when they make a referral it’s actual needed”* (I K lin.369ff.). Actively objecting in such situations is impossible; *“and it wouldn’t be decent if I said ‘you know what, forget those 12 lessons. Come home and we’ll take a look at it’. That doesn’t measure up. So I’ve to pay until the bitter end; with the expectation that only children in needs are in the system”* (I K lin.388ff.).

That the decoupling of responsibilities should tempt someone to assign superfluous support to a specific pupil is, from the perspective of the head of after-school care, both unacceptable and not likely: *“if another leader says that this child needs support, then it’s so. I don’t believe that anyone would charge other schools without cause. We haven’t caught any in doing so. I think it’s the mutual respect. It’s theft. I don’t believe anyone would do it”* (I L lin.516ff). An internal survey has however showed that children receiving support are more likely to be enrolled outside the home-district. The financial employee explains: *“I can’t remember if it was twice or three times as likely compared to children not in need of special support”* (I O lin. 519). Prior, she continuous, there was a general feeling that some children were sort of passed around [challenge cup, vandrepokal] with the attitude that *“maybe it would be better if Peter found service offer at the neighboring school”* (I O lin.523ff.). By having made the home-district financial responsible, including the principals in the broader decision-making process the administration hopes to have put a stop to this. Locally however the perception is that the financial liable principal is not always included. If consulted, District Z’ principal explains: it is often of a mere informative nature: *“Our agreement is that we should consult each other. Let me put it like this; we’re practicing. In reality I can only say ‘oh’ when a school tells me that a child from my district needs a reading class. ‘Oh well 115,000 in total, you’re welcome, hope it’ll help her”* (I K lin.349ff.).

It is clearly stated that the home-district principal must be consulted when decisions affecting the financial commitments of the school are taken. Yet, this does not always happen and this, the financial employee explains, is a mistake: *“They might not have the educational knowledge into the child. But they’re financially responsible. Hence they must be a part of the decision. I understand the frustration that arises if looking at your account ‘Hey! I had 200.000 more last month, what happened?”* (I O lin.479ff.). The local budgetary scope, District Z’ principal explains, is greatly influenced by having home-district pupils enrolled elsewhere and it; *“would proba-*

*bly have looked different if we'd had them from the beginning...we would probably have referred some. But with the educational experience we have today I'm sure we would've been able to include some"* (I K lin.369ff.). Prior attitudes and approaches to special needs education thus affect current operations, reducing the funds available for new initiatives at the schools. Yet, the principal stresses, as the situation is now:

"I just have to accept: 'well it'll be really great when I don't have to pay 250,000-, out of house'. If I could retain the funds with the same number of pupils, 'whoosh! What couldn't we do!' So at the moment I hope that what we have done in the in-schooling with minus 250,000-, will continue into the middle-school forms so that we'll not be forced to send more pupils away" (I K lin.405ff.)

With the devolvement of funds and the renewed attitude towards inclusion 'exclusions' in the in-schooling have been avoided. Bettering the financial situation of the school. Swift and more tailored services have been established, leading to a further rethinking about the interplay between the general and special needs areas.

"A quick calculation says: if a teacher costs 450,000, I would within my 4.5 million-, budget for special needs education, be able to hire another 10. I have 30 now so I would be able to hire one third more if we're able to include all pupils in the general environment. This is of course utopian because not all can be included. Nevertheless a lot of money is in play...this entail rethinking inclusion so it also encompasses being taught in other settings with another type of staff, in the local community, being included here instead of being gathered centrally" (I K lin.865ff.).

The pursuit of inclusion regardless of any economics advantageous associated with it, the principal of District W emphasizes, must however never mean that all pupils are sought included or that already referred pupils are brought back for that reason:

"I don't look at these funds thinking: 'I've to take back these kids the day after tomorrow, and then I'll have the funds available here'. I'm very, very aware that the law makes me responsible for ensuring that the individual child gets the right offer. So my strategy is not to take all children back ... rather it'll be that of preventing i.e. confining the number of pupils who are referred, so that it'll only be when I think it's the only sound solution for the child, when all other options have been exhausted. Here economics must of course not stand in the way" (I J lin.655ff.).

That inclusion must not be perused at all costs is also emphasized by the head of after-school care. Finances, she argues, must never supersede the meeting of actual needs. If a pupil is to be re-included the school must make sure that the services "*are at least as good as the one in which the child is in now. Otherwise keep the hands*

*off. One thing is that you're able to supply a sound service, but are you also able to give the needed level of safety? (I L lin.544ff.).* In her district this dilemma appeared when a family was interested in having their child re-included in the general environment. On the one hand *"we were thinking: 'how great it would be to take him back – 170,000 down our pocket'.* At the same time however it raised the question of *"whether we would actually be able to rise to the challenge with the 170,000, because this isn't even enough to hire one teacher"* (I L lin.591ff). Such decisions are dangerous to embark on; *"you don't send kids away, just to bring them back. If we're to refer pupils then it's what we're going to do"* (I L lin.545), further noting:

*"All research and evidence tells us that included academically weak pupils are able to suffice fairly good in the in-school. But they lose their grip in the middle grades and especially in the older. This is when they're really left behind, because socially these kids also become a challenge for the other pupils and then they will be excluded anyway...so it's catastrophic to take back pupils and then just re-exclude them all over again two years later. This we won't do, not even for 170,000-,. We are talking about pupils. Then rather get a deficit on the frame (I L lin.545ff.).*

Another obstacle in the context of matching needs and services is created by the division of responsibilities among districts and the administration. Since all externally supplied special needs services are paid by the administration, the individual district bears no financial costs when a pupil is referred to such services. This, the municipal manager notes, creates inexpediciencies closely corresponding to those sparking the first devolvement of special needs funds: *"Budgetary and education-related responsibilities aren't linked. When a child has so severe needs that local services have difficulties in matching it, then the management are left with few options as the funds for acquiring external services are retained centrally"* (I N lin.58ff.). The decoupling of responsibilities in fact makes it beneficial for the school to refer a child to these external services. This, accordingly to the municipal manager, creates an increasingly strong pressure for 'exclusions' as was revealed after the visitation-process had ended in the spring:

*"A pattern emerged after we finalized the visitation in January/February. We drew-up the budget and devolved the funds – a more comprehensive devolvement than last year. Then additional referrals to the external services began ticking in. As we don't want to take back funds it actually meant that we had underfunded the central frame for external services. This behavior is adverse, albeit perhaps understandable."* (I N lin.287ff.)

The decreasing pupil numbers further magnifies the increased pressure for exclusions to take place. The special need schools she notes:

*"are under pressure and are looking for business. This comes to the ears of the parents, and there is, in a way, no incentive for the schools to*

counter this pressure. If the school has a child in a local service the cost is 200,000, but if it can be argued that the needs of the child will be better met in one of the external special schools then the school bears no cost. You might say, I'm rude accusing them of thinking in terms of budgets. But of course they do. This inexpediency we have to set a stop to" (I N lin.67ff.).

That the special needs schools are turning on the charm, thereby creating pressure from the parents "*now that a seat has opened up. Why can't my child get it?*" (I O lin.103), is in the eyes of the municipal manager problematic:

"Yesterday we had a case where a special school for pupils with autism simply announced open house in the paper. A mother and her son went there and got the impression: 'Wow this is exactly what we want'... But we know we're able to arrange something which means that he wouldn't have to be excluded at the age of 15. It is completely outrageous because they make it seem as if there is open enrolment here also" (I N.lin.313ff.).

Also the scaling back of services, when these are no longer needed, is complicated by the decoupling. In a situation where a child had finished treatment in a residential institution and was ready to be re-included in a local services, it: "*actually constituted a financial challenge [the municipal manager explains]...because suddenly a bill had to be given to the principal because the child of course still needed some help and this was now to be paid by the school*" (I N lin.95ff.). Such situations have speeded up the process for a new funding model, the financial employee notes: "*we've been forced to think in a second generation model...Maybe we're not developing our own offers quickly enough. Nevertheless the process is definitely being turbocharged in order to ensure that schools have the needed funds to react*" (I O lin.188ff.). Albeit it has led to some inexpediency the two parted devolvment of funds has, according to the municipal manager, not been unfruitful:

"Actually I think the decision to make the process two parted was good. The schools have become familiar with it, and it has improved the general skills in terms of decision-making. This is vital, because the principals get a new set of responsibilities and are forced to make decisions affecting the lives of these more vulnerable kids too. This means they must be better equipped both legally and managerially" (I N lin.73ff.).

## 14.7. CONCLUSION: PRACTICE AND POLITICAL OBJECTIVES

The account presented above has tried to capture how school management is practiced in Municipality B. Visualizing how education and budgetary concerns are balanced against each other, creating a potential tension between the two, when managerial decisions are to be made. As in the first field study, this concluding part

of the chapter will analyze the actual practice in light of the political objectives (see Chapter 12) discussing the actual accomplishment of these as presented in the municipality's Result Status and Quality Report for the school year 2012/13.

The tension between budgetary and education-related concerns is present in the political objectives, with indicators of success expressed as 'educational competences', 'digitalization', 'inclusion', 'learning' and 'competences and collaboration', in the end measured through the objective that 95% of the pupils are to fulfill further education. Simultaneously stressing the importance of ensuring efficient utilization of resources. The actual position of the formula funding model in the upper right quadrant of Figure 13.3 indicates that incentives for quality and efficiency are to stem from both the fairly high budgetary risk and the even higher level of competitive pressure. With respect to inclusion and productivity, the latter improved through high enrollments, direct incentives are given by the model, whereas for the rest there are no direct financial incentives. Rather, these are to be achieved through the wide local autonomy scope, combined with the effect of the fairly high budgetary risk and the consequences of competition and that of being held accountable through the publishing and monitoring of performance. The main lever for achieving the political goals is thus the devolvement of funds. Not only is this to equip the management with the needed financial scope, enabling them to meet the needs of the pupils better, but it is also seen as a precondition for encouraging different educational profiles. Again, the budget is not to act as a straight jacket on management actions but rather as a tool enabling them to use their local knowledge to achieve both budgetary and education-related objectives.

The account highlights how inclusion is given top priority by the local management. Elucidating however that it in reality constitutes a vast challenge for teachers, children and management. The capitation payment approach applied to allocate special educational funds at the outset removes the link between local decisions on needs and the subsequent size of funding, bringing forward incentives for 'prevention' and cost control. *At least for pupils enrolled in the home-distinct school.* Diagnoses of needs are now no longer a precondition for help to be established for pupils with less severe needs. Due to the ban on the establishment of local special needs classes, funds for special educational services can only be spent on acquiring services in one of the jointly run special needs classes, for locally established inclusive efforts or for paying services given to district pupils enrolled elsewhere. The distribution of risk gives the management a clear incentive to include pupils in local services, in that, this will ensure funds to be kept within the district budget to be spent at the full discretion of the management. Such undertakings are as discussed subjected to the danger that needed services will not be established. Especially because the distribution of risk entails that all fluctuations in needs has to be met within the fixed budget and as services given to pupils elsewhere must be paid straight away.

Importantly, the account showed how adverse behavioral responses were created in the context of special educational services, in that, the choice of funding object in combination with the division of responsibilities created critical decoupling of education and budgetary responsibilities. Textbox 14.1 contains relevant results, taken from the municipality's Quality Report for the school year 2012/13, on the externally provided special educational services. From 2012/13 to 2013/14 the proportion of pupils, referred to the special needs services, rose from 5.1% to 5.4% (12 extra pupils). Leading to a substantial pressure on the central municipal budget set aside to cover these services. For the school year 2013/14 this is expected to result in budget overruns amounting to approximately 4.8 million DDK.

Increased pressure on the municipal frame for special educational services. The proportion of pupils 'excluded' to external services has increased and more than expected have been referred to special needs schools. On top of this more pupils than expected have been referred to external services after having been enrolled in internally supplied municipal special needs services.

The school districts have experienced unforeseen expenditures after the referring committee has chosen a local service, rather than an external service. Likewise some districts have further endured extra cost for pupil coming back after finishing treatment in external special needs services.

- *Textbox 14.1 External special needs education, school year 2012/13. Source: Quality Report 2012/13 (05. 11.13, head 84) and Result Status 4 2013 (covers also the first part of the school year 2013/14) (05. 11.13, head 84;86).*

The account clarifies why such behavior occurs. Firstly, the choice of funding object and the division of responsibilities leads to a decoupling for pupils enrolled outside the home-district, giving rise to potential attempts for up-coding these to inclusive-seeking or special needs education services provided in the district. Incentives which are especially prevalent as these types of support more and more are given to the group and not the individual child. Albeit the home-district is to be consulted when decisions on more comprehensive services are made the account highlighted how this is often not the case. Resulting in grave frustration.

Secondly, a decoupling was also created for pupils enrolled in externally provided special needs schools, in that, the 'enrollment-school' if 'successful' in referring a child to these services only stand to lose the pupil dependent allotment, which from a cost perspective may be low compared to actual cost. At the same time such a referral entails that the home-district avoids paying the cost of any special needs services given to the child, receiving still the payments  $p_1$  and  $p_3$  allocated to the district due to the child living there. Thus for home-district, the 'enrollment' and the receiving special needs school a successful referral is attractive from a budgetary point of view. No incentives for inclusion therefore exist to counter the increasing efforts taken by special needs schools in attracting potential customers.

Lastly, the account also highlighted how the division of responsibilities leads to districts incurring unexpected budget strain when a child, following the end of treatment, returns to less comprehensive services, where the budgetary responsibility

is placed locally. All in all, the model brings forward conflicting incentives for inclusion affecting not only the pursuit inclusion but also the overall efficiency by which funds are used. Clear incentives for inclusion though are given for pupils enrolled in a home district department, albeit affected by the amount available when the cost of externally supplied services has been covered. For non-home enrolled and for pupils with somewhat severe needs inclusion efforts may be impeded, a tendency amplified by the fairly high level of budgetary risk.

Concerning improving academic results the model gives no direct incentives, being as it is at the outset independent of academic results. Instead such a focus is to be brought forward by a long-term demand side concern stemming from the high competitive pressure. Where free choice combined with publications of results will induce the management teams to focus on the education level of the pupils as a mean to ensure high enrollments. The account showed that competition is an acute and imminent factor, bringing with it an urgent need to focus on enrollments. Competition is however also seen as an important motivator for developing unique profiles so to set the school apart from the competitions. Including both education, pedagogical and after-school care profiles. The actual fulfillment of the related targets for the school year 2012/13 is summarized in Textbox 14.2. As seen there is still some way to go before the targets are met although the reading results, especially, are attributed to have been negatively affected by the teacher lockout. Yet, it is difficult to isolate the effect of the competitive pressure, and the general conclusion from the administration is that a renewed focus is needed.

**Final grades:** The grade levels vary across schools and subjects. Overall however, the general conclusion is that continuous focus on improving the educational level of pupils is needed.

**Reading:** Only two schools fulfill the targets on reading for pupils in 1<sup>st</sup> and 2<sup>nd</sup> grade. For the 3<sup>rd</sup> and 4<sup>th</sup> grade, none of the schools fulfill the goals. The results indicate a need for a renewed effort directed especially towards 4<sup>th</sup> graders.

**Pupil absenteeism:** The reason for absence varies across schools, the general tendency is however that pupil' absenteeism has increased, especially 'illegal absence' and 'general illnesses'.

**Transition into further education:** 35% continuous in 10<sup>th</sup> grade (a 5% decrease), 44.9% in "gymnasium" educations (a 1.2% decrease) and 12.4% in vocational training (a 2.4% increase).

- *Textbox 14.2 Educational levels, reading results and pupil' absenteeism, school year 2012/13. Source: Quality Report 2012/13 (05. 11.13, head 84)*

The improvements of academic results is from the perspective of the schools and the administration closely linked to the skills of the teachers, an increased use of IT and the establishment of a close co-operation with parents. The account shows how a precondition for high education quality is verbalized as ensuring that teachers teach only in their main subjects. With also the creation of a close relationship with the parents emphasized as all important for countering private school competition, ensuring improvements in the pupils' performance and for gaining support for local

inclusion-efforts. Textbox 14.3 summarizes the teacher related targets. From the account it is clear that the use of IT constitutes a vital political focus area materialized in the swift introduction of E-boards in all classrooms. In terms of the teacher's skills these have improved, while the proportion of the actual teaching has also increased. Although the number of cancelled lessons is low, the use of substitutes has increased in the school year 2012/13.

**IT:** A sharp decline in the number of new computers. E-boards have been installed in all classrooms.

**Teachers' skill:** 89% of the teaching-staff is fully-qualified teachers, a 5% increase from 11/12

**Use of substitutes:** In contrast to last year the use of substitutes is increasing. The number of cancelled lessons is very low. As a result the schools must continue their work with flexible planning.

**Proportion of actual teaching:** The proportion of the teacher's workload actually devoted to teaching has increased 0.8 percentages.

- *Textbox 14.3 IT, teacher' skills, use of substitutes and proportion of actual teaching, school year 2012/13. Source: Quality Report 2012/13 (05. 11.13, head 84)*

These latter matters are closely linked to the local understanding of cost-effectiveness, with flexible planning emphasized by one school as an important tool for decreasing the use of substitutes. Class sizes were further identified as important to ensure a more efficient resource use and for gaining a broader financial scope. As seen the average class size is slowly increasing, albeit the account also highlights how education-related concerns and the department structure in some occasions makes such efforts difficult. Making the multiple department structure simultaneously a barrier and a mean to uphold high averages, affecting the ability to obtain the desired efficiency gains through economics of scale. At the bigger departments larger averages are in general easier to uphold, a need continuously reinforced by the comparable more difficult task at the small departments. The new division of responsibility has made the management responsible for deciding if the smaller departments are to be 'subsidized' to be able to deliver sound services. Albeit it from a theoretical point could imply a reduction in efficiency and effectiveness such subsidies are from a managerial point of view such seen as the only option available in order to uphold desired education levels.

- **Class averages:** By the start of 2013/14 the averages remain stable in three schools, while they have respectively increased 0.7 and 1.4 in the two remaining districts.
- **Expected enrollment:** Three district foresaw a too high level of enrollment (respectively 59, 41 and 39 pupils too many) while the other two had to low numbers (respectively 9 and 40)
- **Private school rate:** The goal of decreasing the private school rate was not accomplished for the school year 2012/13

- *Textbox 14.4 Class averages, expected enrollment levels and private school rate beginning of school year 2013/14 source: Result Status 3 2013 (05. 11.13, head 86)*



As seen the private school rate remains high. This is despite the fact that the account elucidated how private school competition is a main area of focus. The relative high level of competitive pressure, created not at least by the choice of funding object and the division of responsibilities, brings with it a strong managerial need to ensure high enrollments, making it ever so important that at least district pupils are enrolled. The adjustments to the budget in September further prompt a need for precise estimations inducing the management to be prudent in their pre-planning of the school year. Yet, also increasing the local tendency to set aside funds.

Despite the described focus on enrollments Textbox 14.4 illustrates how the management for the school year 2013/14 experienced great difficulties in predicting enrollment numbers. For one district with a brand new department, deemed the ‘flagship’ school of the municipality, the prediction of a too low level of new enrollments showed itself to be dire. Having expected 922 pupils to be enrolled by September 2013 the actual enrollment turned out to be 972 pupils, while it by May 2014 had increased to 1007 (a 9% increase). Since most of these new enrollments were pupils from other public schools the district was only compensated for 21. Yet, three new classes were established and in combination with other decisions this led to too high operating cost, an increased use of substitutes and too many funds being spent on special educational services. Severely affecting the financial situation of the district. By 31.05.14 a deficit of 5.9 million had been created. Against the recommendation of the administration the Children’s Committee decided to allocate a one-off payment of 3.9 million DDK to the district with the expectation that the school is to save a million in respectively in 2014/15 and 2015/16 (CC 11.08.14, head 66; 08.09.14, head 74). It could be argued that the combination of competition and budgetary risk actually induced the management to take in as many pupils as possible, although the immediate budgetary benefit was postponed.

All in all it can be concluded that the formula funding model of Municipality B seeks to affect behavior through a combination of devolvement of funds, specific goal setting, accountability for results and the use of specific direct financial incentives. The actual level of fulfillment of the political objectives shows that there is still some way to go before the political objectives are met. The fairly high level of budgetary risk brings with it incentives for efficiency, albeit it when it comes to inclusion and special needs education is hampered by the decoupling of responsibilities which not only affect the local efforts towards inclusion but also the efficiency by which funds are used. Further although the competitive level prompts strong intensives for high enrollments the decision to only reimburse some enrollments complicates this, potentially also affecting the efficiency by which funds are used. Finally, the possibility and tendency of the private providers to enter into cream-skimming behavior may if the increased inclusiveness is not handled, also affect the ability of the schools to compete over all types of pupils.

The presented account is very much an up-to-the minute-account influenced by the actual shape of the model at the time of data collection. The funding model of Municipality B is undergoing continuous change. As for general education the number of lessons is for the school year 2013/14 expanded from 25 to 30 lessons per week (CC 09.11.13, head 89), while the division of responsibilities in terms of special needs education is further altered. In order to counter the inexpediencies created by the decoupling of responsibilities for pupils enrolled in external special needs services the districts are now to be responsible for all budgetary cost associated with special educational services given to children in the age 6-15 living in the district (except for pupils placed in care). This, it is argued, will enable schools always to be able to prioritize the most 'inclusive' services possible for all pupils. The model is designed so that the district pays a fixed base rate for a pupil referred to a special needs service outside the municipality. The rate corresponds to the most expensive internally supplied municipal service. If the actual cost exceeds this rate it is covered by the administration. The advantage of this, it is argued, is that no district will pay more for a specific than if the child instead is enrolled in a local service; thereby, reducing further the need to set aside funds. The referral procedures remain unchanged (CC 13.11.2012, head 99; 08.01.13, head 4)

## Part V Discussion & Conclusions

In this, the concluding part of the dissertation, the findings of the dissertation are gathered and discussed with the purpose of answering the overall research question.

**Chapter 15** compares and discusses the findings of the two field studies and in doing so the chapter addresses the proposed influence of the funding models on the local practice from different angles. This is done by firstly discussing the findings in the light of the developed framework. The core focus is here directed upon analyzing whether the financial incentives brought upon the two school systems affect the practice of school management differently in a way which is consistent with the different positions of the models in the given framework. Hereafter the chapter discusses how the choice of management control strategy affects the local focus and practice in the two school systems. This is followed by an analysis of how the impact of the formula funding model design is not at least visible when it comes to the more adverse behavioral aspects. The chapter concludes with a discussion of how the devolvement of decision-making capabilities in both settings has especially been influential in affecting the managerial practice but also of how this practice comes to be influenced by political decision-making.

**Chapter 16** finally presents the conclusions and important findings which can be derived from this dissertation. This is done under the headings:

- Does design really matter?
- Balancing budgetary risk and the competitive pressure
- Special needs education and inclusion – what to do?
- Redesigns – if, how and when?



## CHAPTER 15. COMPARISON & DISCUSSIONS

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Up until now the field studies have been analyzed separately, presenting firstly the components of the formula funding model, discussing next the models in the light of the developed framework and finally by presenting how school management is actually practiced in the two municipalities. In this final part of the dissertation the findings are gathered and discussed with the aim of addressing the dissertation's overall research question of; *how do formula funding models in the context of Danish public schools affect local managerial practice?*

### 15.1. DIFFERENT POSITIONS, DIFFERENT PRACTICES?

The analysis conducted in Chapter 10 and 13 placed the funding models of Municipality A and B in different quadrants of the proposed framework depicted in Figure 7.3 From a theoretical point of view this should bring forth different managerial practices. The question is therefore whether this is reflected in the accounts? That is, whether the financial incentives brought upon the two school systems affect the practice of school management in a way which is consistent with the different positions of the models in the given framework?

#### 15.1.1. PRODUCTIVITY, ACTIVITY LEVELS AND QUALITY OF SERVICE

Productivity wise the funding models bring with them different incentives. Theoretically both models prompt a focus on upholding high enrollment levels, although this motivation is arguably expected to be stronger in Municipality B due to the schools here being exposed to a fairly high level of budgetary risk and an even higher level of competitive pressure.

From the accounts it is clear that the incentive to uphold enrollments is indeed present in both municipalities, especially when it comes to counter private school competition. The corresponding attitude towards the existence and effect of public school related competition is however more reluctant. Especially in Municipality A where even questions are raised on whether local actions in effect will differentiate positively the offered services across public schools. In Municipality B such concerns are also present, albeit they mainly address the potential impact of geographic locations on the service levels offered, seen in the light of funding being pupil dependent thus affecting heavily schools unable to influence the number of potential pupils. There is however a clear understanding that the development of local profiles and initiatives for attracting pupils are a natural and inherent part of schools being actors on a market. Across both municipalities clear concerns are further expressed over how public school related competition may come to affect and make difficult the establishment of sound and fruitful relationships between the different public schools. Bringing with it a need to focus on how the management teams behave in

order to avoid adverse sub-optimization from the part of the individual district at the expense of the larger system.

Yet, when studying the findings more broadly focusing especially on the perceived connection between competition, enrollments and quality related matters clear differences between the local practices emerge. In Municipality A enrollments are understood to be closely linked to financial viability, bringing with them a larger scope for managerial action. Quality of education is mainly described as ensuring that teachers teach specific age-groups and in their main subjects. Moreover, the gathering of older pupils in the same department is identified as important in the delivery of sound education services for these pupils. Otherwise the understanding of quality as a mean to compete is only scantily identified in connection to enrollments; indicating that there is not a direct coupling between commercialization of services and the need to be competitive. Instead enrollments and quality are referred to more broadly as parts of wider efforts which also include the establishment of co-operations with kindergartens, engaging the parents and securing that the school has a good reputation. Using e.g. teachers and local media to spread around good stories about the school. The account showed how such efforts are becoming increasingly important as pupil numbers decrease and the perceived level of competition increases. Thus, suggesting that the need to focus on the quality of services as a competitive element is gaining a stronger foothold with the management.

In Municipality B enrollments are clearly verbalized as indicators of quality and satisfaction. As seen there is a fundamental understanding that each school must develop education and pedagogical profiles to boost the education environment and in the process set the school apart from its competitors. In the pursuit of high enrolment levels the management focuses on being visible and getting stories to the media, even contemplating to hire in expertise to handle such branding efforts. For the older pupils the gathering of these in the bigger towns is emphasized as important undertakings for creating exciting environments offering a wider range of electives and making possible also that lessons are taught only by teachers with subject-specific competences. For the younger pupils the efforts include establishing partnerships with the kindergartens but also that of using new organization models such as flexible school start and age-mixed teaching. The so-called 'Children's Villages' are further to bring forth an even stronger bond between kindergartens, schools and afterschool services, creating with it coherent, attractive service offers which will make the de-selecting of the public school difficult. Thus, there is a strong perception that service quality is all important for attracting pupils. Elucidating that the position of Municipality B' funding model brings with it quality related incentives in the form of making services appealing to users so to enhance the 'market share'; means which are also seen as important for improving the utilization of resources.

The accounts thus reaffirm that upholding enrollments is a crucial focal point for the management in both municipalities. In line with the predicted practice clear differ-

ences however emerge when it comes to the link between enrollments, service quality and marketing. As seen, the attempt to ‘commercialize’ services is more pronounced in Municipality B and the school system is here in general further ahead in developing and using new organizational models intended not only to bring forth higher enrollments but also as potential means for efficiency improvements. This supports the theoretical argument that the need to uphold high enrollments is driven by the more pronounced competitive pressure but also the higher level of budgetary risk forcing the management to be also cost-effective in their delivery of services.

On the other hand, it is also revealed how the incentive to uphold enrollments for one of Municipality B’ schools came to weigh so heavy that intakes from other public schools not compensated with additional funds actually harmed the overall budgetary viability of the district; illustrating that the identified incentives are so strong that they almost become adverse. This suggests that albeit the formula funding model design is mainly directed towards motivating public schools to focus on countering private school competition the joint effect of the model components brings with it a strong, even harmful, incentive to enroll as many pupils as possible. An incentive which in the specific case jeopardized not only the overall efficiency but also the local schools, in that, managerial actions led to severe overspending.

Finally, the accounts highlighted how the incentive to uphold enrollment levels in general is not that strong at the department/teacher level. As the distribution of funds across a district is based on managerial decisions and not the actual distribution of pupils *per se* the link between activity and funds is somewhat lost at these levels. This puts pressure on the local management to not only ensure that resources are spent efficiently and effectively, but also to communicate the fairness of the actual distribution to the teachers across the departments. Creating with it a need to focus on changing the mindset of the teachers in order to enhance their understanding of the link between enrollment and funding.

### **15.1.2. PRODUCTIVITY, EFFICIENCY AND QUALITY OF SERVICE**

A central feature of both funding models is that the devolvement of decision-making and budgetary responsibilities is understood as the main lever for achieving the politically set objectives. With the larger budgetary units the hope is that the management, through the widened decision-making scope, will be able to establish sound solutions to the benefit of the children; creating with it among other things the possibility for economics of scale and a more appropriate utilization of resources. Linking education and budgetary responsibilities at the same level is further expected to bring about better decision-making but also improved resources utilizing through for example a better matching of services to the needs of the pupils. Flexibility in the type of services offered is thus expected, affecting positively the quality of education and the likelihood for services to be delivered as cost-effectively as possible. The budget, so to speak, is not to act as a straight jacket on managerial actions, but rather as an enabling tool which will encourage the management to use

their local knowledge to come up with innovative and creative solutions when running the school. The question however is whether the positions of the two models bring about different approaches to how the utilization of resources is approached?

The decrease in pupil numbers to which both municipalities is subjected at the outset spurs along a long-term budgetary focus reflected in the establishment of larger districts. Creating the foundation and conditions needed for economics of scale is in this way perceived as a precondition for efficient management. An understanding which is also reflected locally as the size of the individual department becomes a local focus point and even more so in relation to the individual classes, in that, class size optimization is identified as all important for an efficient use of funds. The district structure with several departments in one school district is in both municipalities pinpointed as simultaneously a barrier and a mean for achieving desirable averages. At the one hand, the district structure may bring forward a more holistic, cross departmental approach especially in situations where geographical distances are not overwhelming; enabling the management to distribute pupils in a way which ensures more desirable averages. But in other cases, the geographical distance is so vast that this is not an option, resulting in more undesirable averages. Yet, as described by a school leader in Municipality B the dilemma is quite straight forward; the budgetary freedom associated with retaining a pupil within the overall district budget is greater than the alternative of losing that pupil due to dissatisfaction with not being enrolled in the school of choice. Even so if it leads to skewed, inefficient averages. The negative budgetary effect of inefficient averages is therefore preferable compared to the more-long term effect of losing the pupil completely.

Class sizes are however identified as the favored way to ensure a more efficient use of funds. Especially in Municipality A where viable class averages are emphasized as *the* main tool for establishing cost-effective solutions; particularly in situations where natural transition points in the course of the education process offer opportunities to optimize or re-amalgamate classes. The need to uphold high averages is described to be so strong that when more controversial re-amalgamations have to take place they often trump the associated opposition from children and parents. Requiring in turn a great deal of communication efforts in order to avoid further dis-enrollments. The account however elucidated that pedagogical driven concerns at times can outweigh the budgetary driven need for high averages. In such situation the individual department head asking for an exemption must come up with other cost-effective solutions in the form of for example co-teaching and group-division. Overall however the use of such initiatives seems to be less systematically organized compared to how similar efforts are used in Municipality B.

In Municipality B the optimization of class sizes is also emphasized as the main way to utilize funds, albeit educationally driven concerns may also here sometime counter this incentive. Reflected for example in the situation where the 9<sup>th</sup> graders were left out of the efficiency-enhancing initiatives following the introduction of the new



district structure. Such a decision, it is argued, is made with open eyes, acknowledging that the associated financial cost requires other initiatives to be taken. Varying department sizes were further identified as a motivating factor for the management to come up with new ways of organizing the teaching. Inducing them to for example implement 'rolling school start', age-mixed teaching and more broadly supporting the new initiative on Children Villages. Such initiatives are, at least verbally, emphasized as parts of a broader strive towards cost-effectiveness, that is, they are understood to be parts of broader attempts to ensure the overall budgetary viability of the school system, the individual district, but more so, also as means to bring about improved education quality. As explained by the management these new organization models ensure that education standards are upheld and potentially further improved, thus suggesting that these measures are a more ingrained part of a systematic effort towards ensuring cost-effectiveness and quality of service.

Overall the accounts show how the focus on class averages requires the management teams in both municipalities to look ahead, taking into account the developments in enrollments. A focus which corresponds well to the theoretical prediction that the competitive pressures will induce the management teams to concentrate on enrollments. Yet, this immediate similarity in practice is slightly altered when studying the local approach to planning. In accordance with the position of Municipality B' funding model the coupling between enrollments, class sizes and planning is strong; stemming from the fact that the budget is adjusted in September. These adjustments prompt a need for precise forecasts in that reliable numbers are all important when staff decisions are to be made. Making the ability to predict/control enrollments the decisive factor for how reliable the preliminary spending frame is. The budgetary risk arising from decreasing enrollments thus bring about a need for prudent practice when planning the school year. Entailing for example that the management keeps a close eye on whether pupils plan to leave and inducing the management further to adopt a more conservative approach when planning. That is, setting budgets on a lower number of pupils than otherwise indicated and further utilizing fully the staff already employed through for example the use of flexible planning. Overall ensuring that the need for substitutes is as low as possible while also prompting a need for the management to teach classes. The account thus highlights that the adjustments induce the management not to spend, allocate or earmark all funds up front, motivating them in turn to set aside more or less large amounts of funds. From an efficiency perspective this may lead to a more prudent utilization of funds, ensuring also that the schools are able to meet unforeseen challenges. However it is problematic if the share of unspent funds becomes too large especially if funds could be better used to improve the service quality for pupils already enrolled.

Nevertheless, the account also elucidated that the management in Municipality B despite this profound local attempt to control enrollments still has some way to go before being successful. As the adjustments to the budget are confined to particular enrollment changes this affects the efficiency by which funds are utilized. The

budgetary effect of enrolling too many pupils from other public schools, accompanied further by other educationally driven decisions, brought with it immediate budgetary consequences for one district. Whereas for the remaining districts the budgetary consequence of planning on a too high level of pupils is postponed to the following year when dis-enrollments happen in favor of other local public schools. From a broader efficiency perspective this represents an inefficient use of funds as these are not spent where the pupils are actually enrolled. The same problem arises in Municipality A, even on a much larger scale. Although class sizes are also identified as crucial for efficient resource allocation the complete lack of downwards adjustments to the spending frame means that the effect of decreasing enrollments is postponed to the following budget cycle. Bringing with it the mentioned possibility that the municipality may come to pay twice for the same pupil. Because as funds are not directly tied to the pupil the same immediate need for prudence is not established; affecting negatively the overall efficiency by which funds are utilized. This means that even though the management focuses on upholding high enrollments and efficient averages the overall efficiency by which funds are used is hampered.

All in all, the accounts show that the managements across the two municipalities have quite a similar perception of what constitute the preferred and most effective way of ensuring efficient resource utilization; manifested in the pursuit of high class averages. Yet, it can be argued that Municipality B is further ahead when it comes to using alternative ways of organizing the teaching environment; a tendency which as discussed can stem from the fact that the model's position in Figure 7.3 brings with it a need to ensure that service delivery is characterized not only by quality but also cost-effectiveness. The coupling between enrollment, class sizes and the immediate need for prudence is further different due to funds being more or less directly tied to the individual child. In Municipality B this is directly reflected in the adoption of a more conservative approach to planning whereas a more ambiguous effect is found in Municipality A. Indicating that the two actual model positions do indeed bring about somewhat different responses and results when it comes to efficiency.

## **15.2. DESIGN, MANAGEMENT CONTROL & PRACTICE**

The above discussion suggests that financial incentives to a large degree do indeed affect the practice of management in the context of the Danish public school system. In order to examine this further this section discusses how the choice of management control strategy affects the local focus and practice. Comparing the political objectives of the two municipalities they look quite similar, revolving around an improvement of the skills of pupils and teachers, increasing the inclusiveness of the general environment and building strong collaborations between schools and parents ensuring the general well-being of the children. On top of this, efficient resource utilization and budget control are emphasized as important managerial tasks and objectives necessary for guiding the delivery of service. There is thus an obvious similarity in the choice of goals. A conformity which is also reflected in the design

of the two formulae, in that, they are both made up of a quite pupil dependent case payment inspired approach for the allocation of general education funds, whereas the funding of special educational services to a great extent is allocated through the use of capitation payment inspired approaches. The focus and formulae adopted in the two municipalities are thus at the outset quite similar. If however studying the models through the proposed lens of viewing funding models as a *package of controls* this immediate resemblance disappears, elucidating that the two municipalities in fact have quite different foci or strategies in their management control.

In Municipality A the overall focus is directed toward the control of special needs education, reflected in the comprehensive devolvement of special education funds and decision-making capabilities. Conversely the funding of the general education is downplayed bringing with it a low level of budgetary risk and a somewhat modest level of competitive pressure. *Vice Versa* in Municipality B the focus is directed towards the control and funding of general education, manifested in the high dependency on enrollments stemming from the adjustment of the spending frame, the choice of funding object and the division of responsibilities. As for the budget for special needs education Municipality B has chosen to proceed more cautiously. Keeping a substantial part of the budgetary responsibilities at the hand of the administration. In one particular area however the municipalities have adopted a quite similar approach and strategy namely when it comes to the pursuit of making the general environment more inclusive.

Interestingly it can be argued, that the difference in management control reflects the identified challenges facing the two school systems; respectively, in the case of Municipality A, the severe socio-demographical challenge and, for Municipality B, that of the vast private school rate. These similarities and differences underpin that the focus of management control to a great extent is consistent with the identified challenges of the two municipal systems, elucidating a clear link between strategy and design. The question is however if the choice of management control is reflected in the local practice and if it in effect helps meeting the identified challenges?

### **15.2.1. GENERAL EDUCATION – THE RETAINING OF PUPILS**

Table 15.1 below compares the overall ability of the two public school systems to retain pupils once they have been enrolled in a public school. This is done by listing the net decrease/increase in actual pupil numbers as well as percentage wise across age grades from one year to the next. The changes are registered at an overall municipality level for the entire public school system implying that variations across districts are not visible. The table further focuses on the part of the school process which is not affected by varying practices surrounding e.g. pre-school start or boarding schools which means that the changes from pre-school to 1<sup>st</sup> grade and from 7<sup>th</sup> to 9<sup>th</sup> grade are left out. Yet, because the table also compares the ability in 2009 to 2010 with the corresponding net changes from 2013 to 2014 the table further brings about an opportunity to detect whether a change in practice has occurred. Bringing

with it the possibility to discuss the potential effect of changes to the funding model, albeit of course no direct causality can be derived.

	Municipality A		Municipality B	
	2009 – 2010	2013 – 2014	2009 – 2010	2013 – 2014
From 1 <sup>st</sup> - 2 <sup>nd</sup>	+5 / +2%	-2 / -1%	+12 / +4%	+3 / +4%
From 2 <sup>nd</sup> - 3 <sup>rd</sup>	-18 / -5%	-19 / -6%	-7 / -2%	-3 / -1%
From 3 <sup>rd</sup> - 4 <sup>th</sup>	-16 / -4%	-6 / -2%	-2 / -0.5%	+2 / +0.5%
From 4 <sup>th</sup> - 5 <sup>th</sup>	-26 / -7%	+3 / +1%	-2 / -0.6%	+4 / 1%
From 5 <sup>th</sup> - 6 <sup>th</sup>	-15 / -4%	+3 / +1%	-9 / -2%	-9 / -2%
From 6 <sup>th</sup> - 7 <sup>th</sup>	-14 / -4%	-8 / -2%	-5 / -1%	-23 / -6%
Average (%)	-84 / -3.8%	-29 / -1.6%	-13 / -0,5	-23 / -1%

- Table 15.1 Net decrease/increase in actual pupil numbers/percentage wise across age grades for the school systems as a whole, October 1<sup>st</sup>, *source: Statistic Denmark*

The pronounced focus on the general education budget brought upon the schools by the design of Municipality B' funding model gives the schools great motivation to uphold high pupil numbers. Not at least because of the fairly high budgetary risk and an even higher level of competitive pressure to which the schools are exposed. A pronounced motivation which is clearly reflected in Table 15.1. As seen, once a child in fact is enrolled the public school system is quite successful in retaining pupils, reflected by the fact that the net decrease over the two periods is only 13 and 23 pupils. When compared with the results of Municipality A' school system it is clear that Municipality B in general is more successful at retaining the pupils. Yet, as likewise visible, the school system of Municipality A is improving while the same cannot be said for that of Municipality B'. A range of explanations can be given for this. Since 2009/2010 the funding model of Municipality A has been changed, becoming more pupil-dependent. The substantial amount attached to each pupil enrolled together with the vast drop in pupil numbers now brings with it a modest competitive pressure, making it desirable from a more long-term budgetary perspective to uphold high enrollments. This development is a possible explanation for why the school system of Municipality A has become better at retaining the pupils.

The converse decrease in net enrollments in Municipality B can, on the other hand, be contributed to the fact that the private school related competition in Municipality B is not only vast but still growing. As previously described one of the private schools has even expanded its capacity without having any difficulties with filling up the new seats. Thus, although the funding model is actually designed so that it is mainly directed towards countering private school competition the numbers indicate

that the school system is experiencing difficulties with retaining its pupils. Further compared to Municipality A which for many years, if not decades, has been subjected to negative trends in birth rates and socio-demographic conditions Municipality B have first within the last couple of years experienced a decrease in the general population; not at least due to an increase in migration out of the municipality. This increased migration could also explain the net decrease in pupil numbers suggesting that pupils are not only enrolling with private providers but may in fact be moving away completely. Despite this the table still illustrates that the school system of Municipality B is better at retaining pupils once enrolled in the public school system. A result which supports the argument that the different focus in management control motivates a more pronounced focus on the general frame in Municipality B compared to Municipality A. It is however interesting to note how both municipalities in the crucial transition year from 6<sup>th</sup> to 7<sup>th</sup> grade where the majority of children is to change school department or have their existing class re-amalgamated, seem to have problems retaining pupils. This is noteworthy as the otherwise explanation for a decrease in pupil numbers in the older classes, namely that of boarding schools, is not applicable for this age group. Suggesting that a renewed focus on retaining pupils is especially needed at this stage.

### 15.2.2. SPECIAL NEEDS EDUCATION – REFERRAL PATTERNS

The possible effect of a difference in management control is also manifested when comparing the municipalities in connection to special needs education. Both municipalities changed their funding models in 2009 devolving among other things a larger part of the funding to the individual school districts. While Municipality A chose an extensive strategy, devolving the major part of the special educational funds, allowing also the schools to establish local special needs classes, Municipality B chose a more cautious approach devolving only approximately half of the special educational funds. Allowing further not individual districts to establish local special needs classes. This difference in approaches is indeed reflected in Table 15.2 which compares the net development in the use of special needs *schools* from 2009 to 2010 and 2012 to 2013 and moreover the net development in the use of special needs *classes* from 2012 to 2013. The numbers are again registered on an overall municipal level thus making variations across districts invisible. It is further important to keep in mind the different socio-demographic challenges facing the two.

	Municipality A		Municipality B	
Special needs schools	2009 – 2010	2012 – 2013	2009 – 2010	2012 – 2013
From preschool – 1 <sup>st</sup>	6 (+6)	2 (+1)	2 (0)	1 (+1)
From 1 <sup>st</sup> - 2 <sup>nd</sup>	0 (0)	2 (0)	2 (0)	4 (0)
From 2 <sup>nd</sup> - 3 <sup>rd</sup>	6 (+6)	7 (+1)	5 (-2)	3 (+1)

From 3 <sup>rd</sup> - 4 <sup>th</sup>	9 (+7)	9 (+4)	4 (+2)	8 (+4)
From 4 <sup>th</sup> - 5 <sup>th</sup>	18 (+9)	2 (-2)	1 (-2)	8 (+6)
From 5 <sup>th</sup> - 6 <sup>th</sup>	18 (+11)	11 (+6)	6 (+2)	10 (+3)
From 6 <sup>th</sup> - 7 <sup>th</sup>	14 (+8)	10 (+8)	4 (+1)	15 (+7)
From 7 <sup>th</sup> - 8 <sup>th</sup>	15 (+1)	19 (+1)	3 (-6)	7 (0)
From 8 <sup>th</sup> - 9 <sup>th</sup>	14 (0)	15 (-2)	7 (+3)	8 (-1)
Total	+48	+17	-2	+ 21
<b>Special needs classes in the public school system</b>	<b>2012 – 2013</b>		<b>2012 – 2013</b>	
From preschool – 1 <sup>st</sup>	8 (+6)		7 (+4)	
From 1 <sup>st</sup> - 2 <sup>nd</sup>	11 (-1)		6 (-6)	
From 2 <sup>nd</sup> - 3 <sup>rd</sup>	8 (-1)		7 (-2)	
From 3 <sup>rd</sup> - 4 <sup>th</sup>	6 (-2)		9 (+2)	
From 4 <sup>th</sup> - 5 <sup>th</sup>	7 (+3)		17 (+3)	
From 5 <sup>th</sup> - 6 <sup>th</sup>	9 (-3)		7 (-2)	
From 6 <sup>th</sup> - 7 <sup>th</sup>	11 (-1)		20 (+4)	
From 7 <sup>th</sup> - 8 <sup>th</sup>	10 (-2)		4 (-7)	
From 8 <sup>th</sup> - 9 <sup>th</sup>	18 (+9)		28 (-7)	
Total	+8		-11	

- Table 15.2 Net development in referral patterns across age-groups to special needs schools and special needs classes for the school systems as a whole.

Comparing referral patterns of Municipality A from 2009 to 2010 with that of 2012 to 2013, it is clear that a new practice has emerged when it comes to referring pupils to special needs schools. Where from 2009 to 2010 48 extra pupils were referred the corresponding number for 2012 to 2013 is only 17. Representing a steep decline in the use of special needs schools. A decline which has occurred simultaneously with if not a static but maybe even a worsening of the socio-demographic conditions of the children has taken place. As for the use of special needs classes additional eight pupils were referred to such services from 2012 to 2013. The design and focus of the funding model gives clear suggestions for this, in that, the overall design of the funding model gives the schools a strong budgetary motivation to retain pupils locally. The establishment of an 'inclusive' practice by for example enrolling the child in a local special needs class namely means that funds can be spent at the full discretion of the management. Retaining the child within the overall district budget gives a

budgetary freedom which is lost if the child instead is enrolled in a special needs school. On top of this, the school also avoids paying the cost of these severe services. Studying the table it further reveals that the use of special needs education is higher for the older pupils. This was also highlighted in the account of school management in Municipality A where it was argued that the need for special needs education often becomes more pronounced the older a pupil gets. Yet, it can also be argued that due to the ethical code it can be difficult to bring back pupils already referred to the special needs services. Suggesting instead, as also supported by the account, that exclusions now are to be avoided all together in the first place. It is again important to note that the highest net increase in referrals to special needs schools occurs in the age-groups around the transition from 6<sup>th</sup> to 7<sup>th</sup> grade. Indicating a potentially different and interesting referral practice for these age-groups.

In Municipality B a different pattern emerges, in that, the number of pupils referred to special needs schools has increased with 23 from 2012 to 2013 compared to the referral pattern from 2009 to 2010. The corresponding referral level to special needs classes have from 2012 to 2013 decreased with 11 pupils. As for Municipality A clear connections between the design of the funding model and the resulting practice can be found. Firstly, in relation to the externally provided services the division of responsibilities means that if a school is successful in referring a child to a special needs school then the associated budgetary responsibility is transferred to the administration. As described, this may prompt someone to seek an up-coding of pupils to these services. Moreover as highlighted by the account, the division of responsibilities makes the home-district school the budgetary liable part bringing with it few incentives for the establishment of inclusive-seeking efforts for pupils with more severe needs. Giving in general the schools few incentives to counter the increasing efforts taken by some special needs schools in attracting potential customers. The account further highlights how the choice of funding object and the division of responsibilities may affect which pupils are being referred to local special needs services. Making the common response in relation to home-district pupils that of avoiding exclusions to special needs classes while the opposite tendency could arise in relation to non-home-district pupils. Factors which together could explain the decrease in pupils being referred to local special needs classes simultaneously with the increased use of special needs schools. As in Municipality A the use of special needs education is also seen to be more pronounced in the older grades again in accordance to explanations given in the account connected to Municipality B. Yet, it was also argued that previous practices to a great extent affect the current level of use, in that, the bringing back of pupils is not understood to be a viable option. As explained this means that the current management may be paying for pupils which they would not themselves had referred to such services. In turn, prompting further the local focus on avoiding sending pupils away to the special needs classes. Again it is also important to observe the sudden increase in referrals for the children in the age-group around the transition from 6<sup>th</sup> to 7<sup>th</sup> grade, indicating again that something extraordinary is happening around this time.

All in all, the discussion illustrates how the postulated difference in management control has the effect that Municipality A' schools are much more focused on controlling the cost and use of special needs education compared to Municipality B. This is despite the fact that the socio-demographic conditions of Municipality A are considerably 'worse' than that of Municipality B. However the discussion clearly indicates that strategy, management control and managerial practice is linked and that the formula funding model design to a great extent affects local practice.

### **15.2.3. INCLUSION STRATEGY – RESOURCE UTILIZATION & QUALITY**

The above discussion elucidates that the management control in the two municipalities has a different focus. However a similar choice in strategy and focus has been adopted when it comes to the quest of making the mainstream public school more inclusive. Inclusion, and with it the need to ensure that fewer pupils are referred to and segregated in more specialized, closed teaching environments, is in both municipalities identified as one of the most vital tasks and challenges facing the public school system. Successful inclusion, it is argued, will improve the quality of education in that pupils will be able to stay a part of the mainstream school system, close to their home-environment. Thereby enhancing the likelihood for these pupils in the end to pass their school-leaving examination.

Another aspect in both models is the scarcity of incentives which are directly coupled to specific political objectives. The devolvement of funds together with the effects of being held accountable through publishing and monitoring of results are instead implemented as the main levers for motivating the management to focus on fulfilling the politically set objectives. The exemption though being that of inclusion. The capitation based approach adopted in both settings brings along strong incentives for 'prevention' and cost control, in that, the management is given a clear budgetary motivation to focus on keeping the children within local services. By retaining pupils all funds can be spent at the full discretion of the management avoiding thus that funds must be spend 'out-of-house' – at the discretion of other parties and maybe to the benefit of other pupils. Moreover, the fixed nature of the budget means that all needs must be met within the allocated budget motivating the management to keep in check the type of services given and the associated effects of these. An inclusive practice, in other words, not only brings along a wider scope for local actions but also a need for prudence in the level and type of services provided. Achieved for example in a better matching of services and needs which in the long run is to reduce the danger for needs being upheld and resources used beyond actual need. Placing early intervention at the center of attention in the efforts to improve the pupil's ability to cope with the educational process; thereby decreasing the likelihood for them being referred to the more severe and expensive special needs services because their needs have not been handled appropriately in time.

Both accounts reveal clearly that a new managerial practice has emerged when it comes to inclusion and that of adapting the mainstream environment to a more di-



verse set of pupils. With the larger decision-making scope the management feels themselves better equipped and able to act to the benefit of the children. In contrast to the previous strict system where a pupil was allotted a fixed number of extra support lessons based on for example a diagnosis or an official decision, both of which could be quite delayed, the accounts clearly illustrate how a new practice has been created. Flexibility and early intervention is now emphasized as key levers simultaneously with a change in how resources are being used. Manifested in the fact that funds and help are no longer strictly tied to the individual child but rather seen as resources which can be coupled to the larger group or class to which the child experiencing difficulties do belong. Thus, bringing about new types of services and approaches to how support is to be given. This however requires the management to focus on explaining to the parents why help is now to be given in a different way and also in new settings. A difficult task due to the often deeply-rooted understanding, among parents and also teachers, that diagnoses are triggers of support. Accordingly the management is focused on decoupling the tight connection between inclusion, support and diagnoses.

A key aspect in this context is how the objective of inclusion is verbalized as being a paramount philosophy involving a complete rethinking of how teaching is to be conducted. Entailing a confrontation with old traditions and ways of thinking, in particular in relation to how needs are understood, handled and met. With the increased focus on flexibility and a more appropriate meeting of needs comes a rethinking of the needs themselves. From an understanding where needs are seen as somewhat static and unchangeable and where the pupil must be helped to fit existing practices, needs are now understood to be more changeable and moreover it is now the education setting which must be adapted to the benefit of more pupils. Changing with it how the teaching is to be conducted and how the children and their parents are approached in such a way that inclusion is seen as a positive thing for all children. As visible from the accounts the managements are gradually changing the practices of the school. For example in Municipality A where the use of two teacher arrangements and group-divisions based on needs and skills are increasingly used across the entire school process in order to accommodate better to a more diverse set of needs. The same initiatives are taken in Municipality B albeit the management is further very focused on establishing a broad, unified pedagogy for their own school district which together with a changed mindset towards inclusion is to bring about safe and sound practices across the school departments and afterschool care affecting also how the children and their parents are approached.

That a change in mindset towards the idea of inclusion has transpired at the managerial level is clearly visible in the accounts. However, whether this stems from having been made an accountable part of the process or from a broader societal change reflected for example in the new legislation on special needs education is difficult to say. Nevertheless, it is clear that a change in attitude, at least verbally, towards the notions of special needs, inclusion, help, support and special needs education can be

detected. At the same time however, the pursuit of inclusion without doubt represents an educational as well as a budgetary challenge. Not only must the services be tailored and adapted to the needs of the pupils, a difficult task in itself, but the teachers must also be equipped with appropriate skills to handle the more diverse set of needs. Bringing with it questions of whether a sufficient level of skills for handling special needs children is actually present in the mainstream environment.

Making inclusion profitable for all thus constitutes an enormous challenge understood to affect not only the general environment, the pupils and teachers but in fact the entire public school system. If not handled probably the pursuit of inclusion is perceived to be a factor which may affect the motivation of the teachers, bringing with it an increased counter pressure for more exclusion. Likewise if the parents, both those with and without children with more specialized needs, are not included in the process or if their concerns or problems are not probably addressed in time similar problems may arise. Moreover, inclusion is also perceived to affect the ability of the public school systems to actively compete with private providers. From the accounts it is seen how there is a strong perception that the idea of inclusion is something which affects the choice of schooling, scaring away more resourced parents who would otherwise not have chosen private schools. The private schools, it is felt, are not contributing or rising to this challenge. Some are even seen to adversely cream skim the more academically gifted pupils leaving the rest at the hand of the public school system. The pursuit of inclusion is in this way seen and verbalized to affect the general teaching environment, how funds are to be spent and also the overall ability of the public school to deliver a sound quality of service.

The potential counter pressure for more exclusion arising from teachers and parents places the incentives structures of the funding model at the center of attention. By incorporating strong budgetary incentives into the models clear incentives for inclusion is created. Through the devolvement of funds the management is made an accountable part of the decision-making process when deciding whether or not a child should be referred or not. Making them thereby aware of the budgetary and education-related effects of their choices, requiring them to consider more carefully what is needed for a child to be able to thrive in the mainstream environment. One could think that the reason why direct financial incentives are given springs from the fact that inclusion compared to other goals, e.g. improving the skills and well-being of pupils, is much more controversial. While these goals are more closely coupled and tied to aspects understood as being the purpose of the public school system, i.e., closely related to that of being a teacher and a school manager, inclusion on the other hand is a controversial and debated subject. Which if not handled appropriately may bring about a range of problems including for example dissatisfied teachers and parents and not at least the danger that needs of the pupils are not appropriately met affecting both the well-being and education-related outcomes for all children.

All in all, this once again illustrates a direct link between management control and funding design. Yet the accounts clearly illustrate how the pursuit of inclusion at times may be hampered by the overall design of the formula funding model or because appropriate local environments prepared to handle these pupils are not created. Successful inclusion is thus a comprehensive task which if not handled in an effective manner can create an even stronger counter incentive for exclusions, in turn again affecting the amount of funds available to be spent in the mainstream environment. A vicious circle may therefore be created which will make an appropriate meeting of needs in the mainstream environment extremely difficult. In this connection, the accounts clearly indicate a local tension between that of fulfilling the overall municipal strategy of inclusion and the real life practice of school management; where the school management is indeed confronted with the more educational driven concerns and pressures from teachers and parents which may go against that of inclusion. Thus, albeit clear incentives are given for inclusion it is far from given that inclusion happens in reality or that it will be successful. Underlining that although a change in mindset at the managerial level can be detected successful inclusion requires much more than a mere verbal change in attitude.

### **15.3. FUNDING MODEL DESIGN, MANAGEMENT CONTROL AND ADVERSE BEHAVIOR**

The above considerations support the claim that formula funding model design indeed affects managerial practice in the context of Danish public schools. But as revealed by the accounts this is also so when it comes to the more adverse behavioral aspects. Illustrated throughout the accounts by a range of examples and situations of how also more adverse behavioral responses are triggered in the actual practice of school management. The accounts for example illustrate how different approaches to carry-overs bring about potentially adverse behavioral responses. In Municipality A one school district is induced to spend to the limit in order to ensure that funds remain in the district, while some school districts in Municipality B on the other hand transfer too much funds across budgetary years as a mean to reduce the high budgetary risk. Albeit there in both situations are given clear quality-related reasons for why such behavior is prudent it may threaten the overall efficiency by which funds are spent and as such the quality of the education given.

While the above discussion illustrates a link between design and strategy it also elucidates the inherent danger that the object and focus of control may become over-emphasized to the detriment of the overall quality of service. In Municipality A the focus is, as discussed, on controlling the cost of special needs education with the clear goal being that of including pupils in the local services. But with this comes the danger that pupils will be adversely ‘pulled-back’ from the special needs schools to the local special needs services or alternatively attempted up-coded to the few services where the budgetary responsibilities are held by the administration. Although the ethical code may make the most common response that of avoiding send-

ing pupils away at all, the bringing back of pupils to the general environment is still an overriding possibility. Especially because districts are also allowed to establish local special needs classes. Whether such behavior is adverse depends on the level of quality established in these local services. Since these services so to speak remain segregated, albeit being placed locally, the pursuit of inclusion may in reality be hampered. Questioning thus not only the overall vision of inclusion but also endangering the actual quality of service provided because the sufficient knowledge and competences needed for meeting the needs of these pupils may not be present. Thus, regardless of whether the response is to avoid referrals or that of bringing back pupils both responses bring with them the danger that budgetary related concerns outweigh the actual meeting of needs.

In Municipality B the focus conversely is directed upon controlling and steering the general education frame. Which as seen in the account may lead to an adverse over-emphasis placed on enrolling extra pupils. This strong emphasis further implies that the control of special needs education, according to the account, has become somewhat neglected. Albeit the ban on establishing local special needs classes reduces the imminent danger that pupils will be adversely brought back to the local education environment the decoupling of education and budgetary responsibilities in a number of areas create unwanted adverse behavioral responses. Reflected for example in attempts to up-code non-home-district pupils to special educational services as the budgetary responsibility lies with the home-district. But also in the increasing attempts to refer pupils to the externally supplied services where the budgetary responsibilities is placed with the administration. The model thus gives rise to conflicting incentives for inclusion, in that, clear incentives for inclusion are given for pupils enrolled in a home district department while for pupils enrolled outside their home-district and for the pupils with somewhat severe needs inclusion efforts may be impeded. A tendency not at least spurred on by the fairly high level of budgetary risk which affects not only the pursuit inclusion but also the overall efficiency by which funds are used.

From the point of view of the municipal administrations there is a clear understanding that budgetary-driven concerns are an important part of the practice of school management. The management must thus always take into account the budgetary effects of their decisions. Yet, the general agreement is that such concerns must never overrule the actual meeting of needs and in relation to this the quest for inclusion does not mean that all pupils can or must be included in the mainstream school. A child must accordingly never be brought back to the general environment only because of budgetary related reasons. Despite this, the accounts illustrate how there are still widespread concerns that budgetary reasoning outweigh the meeting of actual needs by for example not referring pupils in need of special services. Illustrating the overhanging danger associated with capitation funding that services will be depressed due to the associated budgetary risk and that the management in the pursuit of a larger, stable budget base may refrain from referring due to the associated

cost. Whether a decrease in the actual level of referrals is positive again depends on whether similar services can be created through the larger budget base because if the needs of the pupils are not sufficiently met this becomes adverse in nature.

Similar concerns are relevant in relation to the inclusive-enhancing services, in that, the high level of managerial discretion coupled with the budgetary risk brings with it the danger that the inclusive-seeking funds are not spent in the local environment but rather used to establish or acquire special needs services elsewhere. Thus, decreasing the amount available for inclusion in the mainstream environment. As a result local inclusive-seeking services may not be able to appropriately meet the needs of pupils with more severe needs but neither that of those with more moderate needs. Resulting in inclusion turning into merely that of retaining and pacifying the particular pupils in the general environment. At the detriment of the well-being and education-related outcomes of all pupils. Since services like additional support and group-integrated services are no longer classified as special needs education it is difficult to control whether the children are receiving the needed help. The capitation based funding utilized in combination with diagnoses of needs no longer being a precondition for help namely makes it difficult to track funds and thus to ensure that they are actually used in relation to the children for whom these extra resources were indeed intended.

The accounts thus clearly demonstrate that also the more adverse responses are triggered in the practice of school management. Underpinning the argument that albeit formula funding on its own may be able to serve contrasting and similar political objectives the actual effect on local practice can only be understood if the full funding model design is considered. The above discussion reflects thus the well-known dilemma that ‘what you measure is what gets done’ and that the focus on particular goals can lead to adverse behavioral attempts to achieve these at the expense of an efficient use of funds and not at least of the overall quality of education.

## **15.4. CHANGING PRACTICE AND POLITICAL DECISION-MAKING**

An overall theme throughout the field studies is how the devolvement of decision-making capabilities and funds is to create an accountable and responsible management who do consider the effects of their decisions from both education and budgetary-related perspectives. The enhanced decision-making scope is greatly appreciated by the school managements, who feel themselves, better able to bring forth the desired level of service quality but also a better matching of services and needs; all together improving the utilization of resources. The accounts contain illustrative examples of how local practices are changing but also of how the larger scope for decisions brings about new expectations affecting the options, actions and tasks available to the management when performing their job. This is especially reflected in the pursuit of inclusion and through the devolvement of resources for special needs education and general support, in that, the management is now not only ex-

pected to be able to create a more inclusive mainstream environment but also to ensure that pupils with severe needs will receive the services they need, either through the establishment of local services or through acquiring services elsewhere. Reflecting the crux of the matter for the management between being accountable for ensuring quality of service but also that these services are delivered as cost-effective as possible and are given in the appropriate educational settings. It is thus not enough to be able to improve the quality of service especially not if this happens at the expense of a prudent use of funds. Whether the converse is true is less clear. What can be said however is that the few times during the period studied where local decisions have led the administrations to pursue a change in local leadership it was due to budgetary-related problems. Thus, the accounts illustrate the tension between education and budgetary related goals present in the practice of Danish public school management.

At the same time, the accounts also highlight how political decision-making is perceived and verbalized as an important factor which influences and frames how school management is practiced. Not only in terms of the content of education but more broadly as something which affect the ability of the management to bring about desired results measured both in pupil-related outcomes but more so also in relation to being able to establish an efficient utilization of funds. The wish for more use of IT in the teaching illustrates perfectly this dilemma. The swift decision in Municipality B to install E-boards in all classrooms is especially pinpointed as an example of political decision-making which is expected to affect greatly how teaching is to be conducted. At the same time, it also represents an example of how such decisions at times are perceived to be taken without a deeper analysis into the actual cost-effectiveness and overall outcome. More broadly the accounts also elucidate how decisions on especially inclusion but also on carry-overs and school structures in combination with desires to uphold local services for the younger pupils are perceived to affect the way and setting in which teaching is conducted and with it the local ability to ensure efficiency and quality of service. Decisions on school structure are across both municipalities identified as one of the crucial political issues affecting the local management in their practice. Emphasized as both a barrier and a mean to create economics of scale the multiple department structure implemented in both municipalities is in this way seen to be of vital importance for the daily practice. The geographical locations of the departments combined with the distance between them are here pinpointed as something which affects adversely the ability of the management to deliver the desired service levels while still upholding an efficient utilization of resources. The department structure, it is argued, prompts the need for higher class averages in the large departments. A need not at least reinforced by the similar more difficult task at the smaller departments with fewer pupils pr. year group. The political wish to uphold local services in also the smaller communities thus motivates the management to allocate a larger share of resources than otherwise indicated to the smaller departments. From a theoretical point of view this implies a reduction in efficiency and effectiveness; whereas it from the managerial

point of view is seen as the only viable option for upholding an acceptable service quality at these small departments too. As a result increased intake in one department may not benefit that particular department since funds due to managerial discretion may be spent elsewhere in the district. Similar in cases of other successful cost-effective measures, such as higher class averages or a decrease in use of substitutes and in particular in situations where the mainstream environment has become more inclusive, these cost-effective efforts may not bring about a corresponding fair budgetary advantage. Understood as having these gains in efficiency being reinvested and spent in the same department as they were 'earned'. As illustrated this creates frustration among the teachers who do not feel that their increased 'productivity' is being rewarded proportionally.

Such frustrations among the employees, due to perceptions of unfairness and the feeling that the bigger departments suffer from having to subsidize the smaller puts pressure on the management to focus on building a strong sense of unity across the departments. District management is thus perceived to bring forth a widened scope of decision-making but at the same time also new responsibilities and expectations that service levels also will be upheld at the more remote located departments, not always able to be self-financing. The management is accordingly becoming more aware of both the educational but also budgetary consequences of upholding local services. Especially in times of a decreasing pupil population. As highlighted in the accounts this brings with it a growing agreement among the school managements that the small school departments are not desirable – neither from a pedagogical and educational perspective nor from a more budgetary-driven perspective. Albeit initiatives such as Children's Villages, 'rolling school' start and age-integrated teaching may ensure a more efficient use of funds, amending some of the negative consequences associated with having smaller departments, the existing inefficient building stock is strongly emphasized as an important reason for why a more efficient use of funds cannot be achieved. This is interesting in that the managements to some extent disclaim their own liability when it comes to actually ensure efficiency and desired service levels. Understood in the sense that the politicians through their role in setting the overall frame in the end also affect the ability and the limit to which efficient resource utilization can be created.

That the managements themselves disclaim liability is noteworthy in that this is exactly what they themselves criticize the politicians for doing. That is, they somehow question the fairness of the politicians having through the devolvement of funds placed the responsibilities for an impossible task at the school level. Impossible as the service quality and budget compliance cannot be achieved parallel with the desire to also uphold local services. There is accordingly a local feeling that the management is becoming responsible for the effects of the political decisions, in that, the responsibility for decisions on aggregates are now placed at the local level. In this way, the politicians can to some extent decouple themselves from the consequences of the formula funding model in place. Creating in turn a bottom-up pressure from

the local management and maybe even from the teachers for political actions when it comes to the political difficult questions on reorganizations of the district structure and perhaps even the closing of particular school departments. This is for example reflected in Municipality B where an important managerial tool is that of creating separate department accounts to be presented to the employees elucidating problems of enrollments and cost structures. Likewise in Municipality A there is created a strong sense for the need to change further the structure of the already amalgamated school system. Through having been made responsible for a more diverse set of departments the managements have become aware of the cost of running these creating again a bottom-up pressure. Making the managements possible important allies for the politicians when tough decisions on school structures have to be made.

To sum up this chapter has tried to capture the effects of the funding models on the local managerial practices elucidating with it the impact of the funding models different positions in the presented framework. The above discussions which address the dissertation's overall research question from different angles clearly show that the design of formula funding models indeed do affect the practice of school management. That is, showing how the actual model positions bring about somewhat different responses and results when it comes to efficiency but also in terms of how tightly a local link is created between competition, enrollments and quality related matters. Yet, the accounts also elucidate how quality-related concerns can outweigh the financial incentives of the funding model. Overall however, the above discussions clearly illustrate that strategy, management control and managerial practice are linked and that the formula funding model design heavily affects local practice also when it comes to the more adverse behavioral aspects. Importantly the accounts elucidate how practices are changing as a result of having been made accountable for a larger part of the funds. Reflected in particular in connection to local management control efforts where the local budgeting practices are slowly changing with more people becoming involved. Turning the budgeting process within the districts into a sort of internal negotiation where also department heads and maybe even the teachers become included. Illustrating thus how the department heads are becoming more involved when the local budgets are to be set requiring them to be able to justify and explain their need for resources but also the general results of the departments in terms of for example enrollment levels. In this way, these too are attempted made aware of the budgetary consequences of their decision in relation to matters such as service levels, teacher norms and the use of substitutes and so on. Yet, the accounts also show how even the teachers are encouraged to suggest initiatives concerning their subject accompanied with budgetary considerations. Illustrating how the mindset which requires that also budgetary-related concerns are taken into account slowly seeps down through the layers of the organization. From the municipal administration, to the school management further to the department heads and finally all the way down to the individual teacher.



## CHAPTER 16. CONCLUSIONS & PERSPECTIVES

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Studying and thereby enhancing the understanding of the behavioral impact of the formula funding models used to allocate funds from the Danish municipalities to the local public school districts is the aim of this dissertation. Broadening the knowledge on this subject is important due to the large amount of public spending being used on education combined with the fact that the research literature and the praxis-related field literature at the same time is characterized by a lack of well-documented evidence of the actual effect of such models. Something which has resulted in the field being instead largely governed by anecdotal evidence and personal opinions and preferences on what constitutes best practice and on what can be expected from increasing local accountability and competition among public sector providers. Circumstances which all together makes this research endeavor important from both a theoretical and practice-related point of view.

In an attempt to address the overall research question of *how do formula funding models in the context of Danish public school funding affect local managerial practice* the study has combined the two separate sets of discussions that of formula funding model design and that of incentives and behavioral responses. Addressing thus the subject of study from different angles by firstly presenting central aspect important for understanding the context in which public school funding operates, including for example an analysis of the development in legislation on public schools (Chapter 2) and of the understanding and use of special needs education (Chapter 3). The components making up formula funding models were then analyzed (Chapter 5) together with the associated behavioral responses (Chapter 6); findings which in Chapter 7 were combined into a framework based on the theoretical understanding of viewing a formula funding model as a package of controls. Lastly in order to capture the effect of a formula funding model in practice two field studies were presented and the subsequent results discussed. The qualitative field study methodology made possible a presentation of how school management is actually practiced allowing the discussion to move beyond the standard economic Principal-Agent perspective which has otherwise been a favored method in the study of incentives and public sector governance (see e.g. Oates 1999; Dixit 2002; Burgess & Ratto 2003).

Although the field studies are restricted only to two examples of the relationship between formula funding model design and managerial practice they represent a unique, in-depth analysis of the effect of formula funding models which otherwise to the best of my knowledge is not found in the literature. The findings captured above bring forward important insights, also more broadly applicable, into the effect of for example different payment types, the advantages and disadvantages associated with linking budgetary and education-related responsibilities locally as well as into the

effect of the overall formula funding model design. All in all, this brings forth a range of contributions related to and captured in the following headings:

- Does design really matter?
- Balancing budgetary risk and the competitive pressure
- Special needs education and inclusion – what to do?
- Redesigns – if, how and when?

## 16.1. DOES DESIGN REALLY MATTER?

The core question addressed is whether it is actually possible to influence the managerial practice of school managers through the design of the formula funding model. That is, whether the way in which resources are allocated to providers in effect affects the options, actions and tasks available to the local school management when performing their job or whether the managerial practice in reality remains unaffected by this, governed instead by education-related considerations and half-hearted attempts to and attention directed upon ensuring budget compliance and efficiency? The study clearly reveals that the latter is not the case showing instead that the managerial practice of the management under study is in fact strongly affected by the specific design of the formula funding model in place. In effect, the dissertation shows how the design of the formula funding model comes to determine the decision-making scope and level of discretion available locally and not at least the types of tasks left at the responsibility of the management. The formula funding model design in this way influences and determines the scope for action but at the same time also the opportunity/danger for the more adverse behavioral responses to be triggered.

On the other hand, the study of practice illustrates how education-related concerns are important; at times even countering the financial incentives of the funding model. Education-related concerns do indeed influence the school managers when decisions are to be made, though in a way where the associated budgetary consequences must also be taken into account and counterbalanced locally. Requiring the management to be able to manage and balance the need for quality and equal access to services against the need for prudent practice and budget compliance. Illustrating thus how budgetary considerations are not secondary concerns but rather an intertwined part of the practice of school management. Nevertheless the study also elucidates that despite the importance of financial incentives these can never eliminate or render superfluous the need for a capable management equipped with the needed skills for managing and meeting the local tension which potentially may be created between budgetary and more education-related concerns. It is, in other words, clear that no formula funding model, no matter how it is designed, will be able by itself to adjust for an inadequate level of funding or for an incompetence of management. At the same time, the study clearly highlights that design and managerial practice may be linked in a way so that the municipal administration through the formula funding

model can affect the local practice of the school management in a way so that the management is more likely to act in accordance with the political objectives while being discouraged from engaging into behavior contrary to these goals.

Overall, this brings forth strong arguments for the importance of understanding the full design of the formula funding model in place, as well as the effects of the individual components. Whereas Aas (1995) and Barnum *et al.* (1995) stress the importance of understanding the precise method of payment when studying formula funding due to the powerful incentives created by these in terms of prompting provider behavior in relation to ensure quality, efficiency and equitability, this study illustrates that it is not enough to focus solely on the method of payment. Rather, in order to understand the full incentive effect on providers the complete set of incentives associated with the formula funding model must be taken into account. Otherwise, important incentive structures may be over-looked and misspecifications may occur. Albeit this may seem as a straight forward argument the importance of this kind of approach is emphasized throughout this study as the field studies clearly elucidate that the individual components may prompt oppositely directed incentives. The field studies in this way constitute illustrative exemplifications of the appropriateness of viewing a formula funding model as a package of control following the definition of such as put forward by Grabner & Moers (2013). In particular the studies illustrate how the components in practice are not necessarily designed so that interdependencies and goal congruence among control practices are taken into account or ensured. Not only may the individual components address different aspects or control problems but the studies also describe how new control practices or components may be implemented or other redesigned without possible interdependencies or overall goal congruence being taken into account. In fact, the studies show that the components are not at all interdependent as the individual components in effect may bring about conflicting incentives; potentially triggering behavioral responses which are not in line with the objectives of the service area. Illustrating further that goal congruence is far from given and that the construction of the full formula funding model is influenced and affected by decisions made at different levels i.e. at the political, administrative and local school level.

The study thus make plain that while the specific components may be interrelated they are not fully interdependent. At the same time however, the field studies illustrate how the design of a specific component may increase the importance of another. Elucidating in this way Jaworski's (1988) argument, that the specific mix of control may produce negative and positive synergies; the latter to such an extent that *complementarity* may be created. That is, that the presence and design of one component increases the 'value' and effect of another (Milgrom & Roberts 1992, 1995; Ennen & Richter 2010). Designed appropriately a formula funding model may thus be able to trigger stronger behavioral responses than otherwise indicated if considering only the isolated effect of the individual components. Likewise, situations may occur where the intended effect of one component is decreased by the presence and

design of another. The study in this way illustrates and expands on the theoretical argument put forward by Smith (2007a:18) that understanding the associated effects of a particular payment method is important, in that, the “*precise **method** of paying may have important incentive effects for the recipient of funds, over and above the **level** of funding*” (emphasis in the original). That is, if designed appropriately, so that positive synergies and complementarity are created, a formula funding model may encourage even more strongly behavior in line with the politically set objectives. If however the notion of viewing the formula funding model as a package of control is here not kept in mind the opportunities to create such important synergies may be overlooked meaning that vital opportunities to affect local behavior may be foregone. Creating a situation where the managerial practice may come to be governed and depend solely on the managerial competences possessed locally. More adversely, the fact that the components are interrelated may also bring about situations where the created synergies are so strong that the associated incentive effects become adverse and counterproductive as the providers may become overstimulated in relation to certain behavioral responses which from a broader public service perspective are not desirable.

The dissertation clearly shows that formula funding model design may be linked to management control and strategy in a way so that specific objectives are more likely to be pursued. Management control and strategy can, if the formula funding model is designed appropriately, be combined so to encourage even more strongly behavior which is in line with the politically set objectives. The impact of the formula funding model design may thus appear more or less indirectly. Directly through the incorporation of specific financial incentives into the formula, which in this dissertation has especially been visualized in connection to special needs education and inclusion; but also more indirectly through the overall configuration and design of the full funding model. The findings thus support and elaborate on considerations put forward by Broadbent *et al.* (2010) that the transfer of resources and the accompanying controls in the context of public sector funding acts as an indirect steering mechanism for behavior. Illustrating further that the need to incorporate more direct financial incentives into the model may depend upon how closely coupled the specific goal is to what is otherwise understood as being the core purpose of the public school system and that of being a principal of school.

## **16.2. BALANCING BUDGETARY RISK AND THE COMPETITIVE PRESSURE**

An important issue of this dissertation has been to identify characteristics able to capture the behavioral impact of the overall formula funding model. Adhering in this way to the understanding put forward above that it is insufficient to understand and focus solely on the separate effects of the individual control components if wanting to understand the full behavioral impact of the package of control in place. Based on the analysis of control components and that of the associated behavioral responses

and incentive structures this study has proposed that the level of budgetary risk and competitive pressure are the two central levers of formula funding models affecting behavior in the context of Danish school funding. Arising respectively from an internally and an externally source of uncertainty/risk these two control characteristics are identified as the main factors influencing local managerial practice, understood as the options, actions and tasks available to the local school management when performing their job.

The two field studies clearly support this point of view. Not only do the studies show that the managerial practice in the two municipalities is affected differently, in a way which is very much in line with the theoretically predicted practice. But they further make plain that the two types of risk or uncertainty are very influential in ensuring that the funding model becomes more than a mere reimbursement system, making it instead a mean through which providers are encouraged to operate prudently and efficiently ensuring also that the quality of services is upheld. By emphasizing the important role that risk and uncertainty play in affecting provider behavior the study brings substance to the claim made by Broadbent & Guthrie (2008) that understanding the role risk/uncertainty plays in the context of public sector governance is crucial. Further, by coupling the two particular levers with knowledge on behavioral responses and incentives this study presents a framework which hopefully makes up a relevant tool for understanding the relationship between formula model design and managerial practice.

Importantly, the field studies also contribute with deeper knowledge and insights into the actual impact of budgetary risk and competitive pressure on provider behavior. From a theoretical point of view a range of advantages and disadvantages has been associated with a widening of local budgetary risk in the form of decentralization and the linking of responsibilities at the local provider level; including for example improvements in allocative and managerial efficiency (Glennester 1991; Pollitt 2005). Similarly, competition is theoretically expected to bring forth advantages such as decentralization, enhanced user choice, diversity of providers and not at least high quality of service (Le Grand 1991; Cutler & Waine 1997). Yet, when studying the actual effects of competition the expected merits are questionable and not necessarily obtainable (Nannestad 2004). A range of theoretical assumptions on the effect of budgetary risk and competition thus exists but there seems to be a lack of knowledge on how this manifest itself in the practice of school management. The two field studies presented here therefore bring important insights into this contributing especially with knowledge on the behavioral impact of linking budgetary and education-related responsibilities at the local school level. It is clearly illustrated how a decentralization of responsibilities, as for example argued by Pollitt (2005), ensures that decisions are made closer to the users. Reflected especially in relation to special educational support where decisions on support and help are now made closer to the home-environment. With the benefit that the child and its parents can become a more active part of the process compared to the prior system where

the feeling was that decisions were taken by a distant actor without actual insights and connection to the particular child and its needs.

The devolvement of responsibilities also enables a more flexible approach to be adopted leading to a possible better matching of needs and services. Thus, the findings elucidate and correspond closely to the arguments put forward by Ouchi (2003) that a decentralization of responsibilities helps to create services which are more responsive and better in tune with user needs and demands. The field studies in this way represent illustrative examples of the theoretical presumption that flexibility in terms of services- and resource use may be created by devolving responsibilities to the local level. Elucidating also how the increased room for discretion may act as an enabling tool, prompting the management to be innovative in their approach to services and to the utilization of resources. The linking of budgetary and education-related decision-making capabilities at the local school level thus brings forth an accountable management, which using knowledge available due to being close to the users, is able to establish a better matching of services and needs. Supporting the claim made by Glennester (1991) about the general desirability of anchoring decision-making power at the local level.

Likewise, in relation to competition the field studies show how an enhanced competitive pressure may motivate the management to focus on the quality of services as an element in the competition for attracting pupils. However, it is also made clear that enhanced competition may lead to sub-optimization within the municipal system; a development which may harm and hamper the creation of cooperation among the service providers. The findings thus clearly illustrate the theoretical duality inherently present in the two proposed levers of managerial practice. At the one hand budgetary risk and the competitive pressure may prompt a local focus which ensures quality of service, tailored more precisely to the needs of the pupils, while also ensuring a more efficient use of funds. Furthermore, it may create a local sense of responsibility making the management aware of the consequences of not only their own decisions but also that of the competitors. But on the other hand, the findings elucidate the potential disadvantages associated with a decision to widen the level of budgetary risk and competitive pressure. Not only may a particular decision bring forward the risk/opportunities for adverse actions to occur but if a too excessive level of budgetary risk and competitive pressure is brought onto the providers it may further prompt the management to seek actions which are not desirable. Resulting for example in particular actions becoming over-emphasized while others may not be carried out at all. Underlining again, the importance of not only being aware of the obvious dangers associated with a particular design choice but more so also to take into account the discussed possibilities of synergies which may enhance the behavioral impact of specific and seemingly isolated design decisions.

This creates a tension which can only be resolved by finding a correct balance of or mix between the level of budgetary risk and competitive pressure. That is, finding a

combination where neither a too excessive nor a too low level of budgetary risk or competition is brought upon the providers. Because if not obtained, the proper level and types of incentives may not be created leading to situations where the funding model due to a too low level of budgetary risk and competition brings with it no behavioral incentives for prudent practice and for upholding the desired level of quality; making the subsequent results depend solely on the competences of the school management to ensure budgetary and education-related goals. Or to situations where the combination of budgetary risk and the competitive pressure is too strong causing instead to an over-stimulation of particular responses which is not counterbalanced by education-related concerns.

The findings, in other words, extend the theoretical predicted practice as proposed in Chapter 7 and further suggest that a correct and prudent balance of budgetary risk and competitive pressure must be found; a balance which will be highly context dependent especially when it comes to the competitive pressure. Being an externally created uncertainty stemming mainly from the prevalence of private schools providers the specific level of competitive pressure to be induced onto the providers depend on the competitiveness of the actual system. In situations where the school system is affected strongly by private school competition it will, from the perspective of wanting to create opportunities for fair and equal competition, be most feasible to increase the competitive pressure by improving the abilities of public schools to compete over pupils. The specific balance between budgetary risk and competitive pressure is thus very context dependent differing from one municipality to the next. As such, if the competitive pressure is enhanced this might mean that the corresponding level of budgetary risk must be reduced so to ensure that the incentives springing from the formula funding model do not become too excessive. Or vice versa that the level of budgetary risk must be enhanced if the competitive level in effect reduces. Yet, if a municipality is successful in creating an appropriate balance between budgetary risk and competitive pressure this may facilitate the creation of dynamic tension (Mundy 2010) bringing with it better services and resource utilization but also organizational learning which may ensure that the objectives of the service area are more likely to be fulfilled.

### **16.3. SPECIAL NEEDS EDUCATION & INCLUSION – WHAT TO DO?**

That the design of formula funding models has an impact on local practice is especially prominent in relation to special needs education and the quest for more inclusive practices. The renewed vision of making the public school system more inclusive reducing the proportion of pupils being referred to the comprehensive special needs services has brought with it the general perception that the funding models must be redesigned to support this. Causing a need for deeper knowledge of how this is to be done and not at least of how such changes may affect local practices. The two municipalities under study were, following the Structural Reform in 2007,

some of the first to incorporate inclusive-enhancing measures in form of devolving substantial parts of their special educational funds to the individual school districts. Albeit certain similarities between the two approaches exist, the designs still differ as well in structure as in the speed by which the devolvement has taken place; making them excellent cases for studying the effects of different design choices.

Common to both is the attempt to link budgetary and education-related responsibilities at the local level. The devolvement of responsibilities and funds has, as seen, created a more accountable management who feels themselves better equipped and able to act to the benefit of the children; suggesting that anchoring responsibilities at the local level is advisable. The increased decision-making scope buttressed further by the legislative amendment of 2012 has created conditions for a more flexible approach to be developed; an approach where the decision-making capabilities are strongly attached locally and where the role of the school manager is vital. In contrast to the previous strict system where a pupil was allotted a fixed number of extra support lessons based on a diagnosis or an official decision, both of which could be quite delayed. With the enhanced decision-making scope a new practice is created where flexibility and early intervention is emphasized as key levers affecting how resources are being used. Funds and help are no longer strictly tied to the individual child but rather seen as resources which can be coupled to the larger group or class to which the child experiencing difficulties belongs. The field studies in this way illustrate how the devolvement of decision-making capabilities affects the types of services created in the mainstream environment and with it how pupils with special needs are approached.

At the same time, the studies reveal the importance of incorporating direct financial incentives supporting the vision of inclusion. Inclusion is not a straightforward and unproblematic endeavor at times made difficult due to deeply-rooted understandings among parents and also teachers that diagnoses are triggers of support as well as perceptions of the appropriateness of a particular child being referred to more comprehensive services better equipped to address its particular needs. Incentives to counter and withstand, when appropriate, such pressure for exclusion are therefore needed. The use of capitation funding here brings along strong incentives for ‘prevention’ and cost control giving the management a clear budgetary motivation to focus on keeping the children within local services; as retaining means that funds can be spent at the full discretion of the management avoiding thus ‘out-of-house’ spending – at the discretion of other actors and maybe to the benefit of other pupils. Moreover, the fixed nature of the budget means that all needs must be met within the allocated frame motivating the management to keep in check the type of services given and their effects. An inclusive practice, in other words, not only ensure a wider scope for local actions but also a need for prudence in the level and type of services given. Achieved for example by a better matching of services and needs which in the long run reduces the danger for needs being upheld and resources being used beyond actual need; placing early intervention at the center of attention to improve



the pupil's ability to cope with the educational process and thereby decreasing the likelihood of them being referred to more severe and expensive special needs services because their needs have not been handled appropriately in time.

The findings accordingly support the theoretical implications associated with capitation payments. As noted by Smith (2007a) funding localities as a risk pool brings about incentives for prevention and cost control and likewise in Dhuhy & Lipscombe (2009) where it was shown how the implementation of a 'state capitation reform' affected the disability- and placement rates as the new capitation funding model lowered disability rates. A result which the authors noted indicated that tying funds to the individual pupil affected 'negatively' how special needs education was given. The result presented above similarly show how the use of capitation funding in combination with a legislative change to some extent removes the link between funding and local decision-making over disability identification and placement; reducing thereby the immediate propensity to provide special needs education services as a mean to compensate for the extra costs, i.e. the danger of 'diagnoses for dollar' or up-coding. The above content, illustrated in particular in Chapter 2 on the development in use of special needs education, thus support the theoretical argument put forward by Marsh (1998:121) that "*an allocation system which provides additional resources to any pupil who can be certified or measured as meeting the criterion for additional resources provides an incentive for parents and the school to secure the necessary identification for that pupil*". That is, resulting in a situation where such a system over time will be likely to generate an increase in the number of pupil eligible for extra funding, with the number of pupil referred to segregated, comprehensive settings further increasing (Banks *et al.* 2015). At the same time the results also clearly question the simplicity of this statement. Namely, that this is not due solely to the payment method but more so to the overall design of the formula funding model.

The two municipalities under study use a capitation funding inspired approach which in principle should bring forth incentives for prevention and cost control reducing the use of special needs education. This incentive is strongest in Municipality B where a pure capitation approach is utilized whereas the funding model of Municipality A could prompt up-coding due to the existence of varying payments. Yet, the development in use clear shows that the expected decrease in the use of comprehensive special needs education do not occur in Municipality B while it actually sets in in Municipality A. Something which may be explained by using the full design and strategy employed in the two settings. In Municipality B the division of responsibilities and choice of funding object for example overrule the financial incentives stemming from the payment type, motivating instead potential up-coding of non-home district pupils and the shifting of pupils to services where the budgetary responsibilities lies with the administration. In Municipality A conversely the existence of varying payments should theoretically motivate up-coding of pupils. Nevertheless, the overall management control strategy together with the fact that schools

are allowed to established local special needs classes actually reduces the use of the comprehensive services in special needs schools while increasing the number of pupils in the local services. All in all, underlying the importance of viewing the formula funding model as a package of control.

Overall, the findings seem to indicate that linking budgetary and education-related decision-making power at the local level make possible the creation of accountability, a better matching of services and thereby a better quality of service. Supporting the arguments made by Hartmann (2001) and Horn & Tynan (2001) that a separation of the general and special needs education funding is problematic as it may lead to increased spending levels. The devolvement of responsibilities and decision-making power namely bring forward the establishment of more inclusive services while also ensuring that pupils with severe needs receive the services they need, either through the establishment of local services or the acquirement of services elsewhere. But as seen the capitation based funding may motivate providers to depress the use of services as a mean to endure the budgetary risk (Smith 2007a). That is, needed services is not established, children may not be referred to needed services or others may be re-included in the mainstream environment due to budgetary-related considerations. The increased flexibility and decoupling of funding and needs is thus not unproblematic, in that, it, as predicted theoretically, may endanger the creation of local accountability (see e.g. Meijer 1999; Riddell *et al.* 2006; Banks *et al.* 2015. Because as funds are no longer strictly tied to particular children it becomes difficult to control that the allocated resources are used in relation to the children for whom additional resources were intended.

Handling the funding of special needs education in many ways illustrates the core dilemma confronting a municipality when designing a formula funding model. Namely that between wanting to create local decision-making freedom and the retaining of central control; both budgetary wise and in relation to education-related decision-making power. If too much freedom is given it may threaten the ability to create equal access to services; reflected for example in the distribution of responsibilities for making referrals and deciding upon the types of special needs services to be established. Where too much discretion may imply that more comprehensive services able to cater to the needs of children with more severe special needs will not be established; threatening not only the ability to ensure equal access but also the fulfillment of the legal requirement that the needs of all children must be appropriately addressed. To avoid this it may be appropriate to uphold a central decision-making body responsible for deciding what types of services is to be delivered within the municipality as a whole. Ensuring that the actual need for services across the entire municipality is taken into account and more so when decisions are to be made on the type of services given to the individual child. On the other hand, if too much central control is imposed, reflected for example in low appropriation levels and few funds being devolved this may lead to a large share of the education-related funding not coming into play; potentially hampering the creation of proper local incentives

and further increasing the likelihood that more adverse and undesirable behavioral responses may be triggered.

The core task when designing a formula funding model is thus that of finding the correct mix between budgetary risk and competitive pressure so that proper incentives are given for the entire education process. This may be done in many different ways through the use of different types of payments. However it is crucial that this is done in a way so that the potentially adverse behavioral aspects, which are inherently present in any design, are kept in mind; making it important to develop proper control systems able to monitor and control that such behavior does not threatening the overall service delivery. Design and control however is not sufficient. As noted the linking of responsibilities and strives for increased local accountability in the two studied settings has happened parallel with a legislative change stressing the quest for inclusion and with a detected change in local mindset. That is, a new attitude towards the core understanding of inclusion and special needs education has become rooted with the school management. From a situation where the focus revolved around integrating pupils and where the deficit or problems recited within the individual child the focus is now directed towards changing the general environment to better suit the child. Illustrating the difference suggested by Alenkær (2009) between a pursuit of inclusion instead of integration (see also Reid 2005). The field studies in this way illustrate how the local approach to the vision of inclusion has changed with successful inclusion now perceived to create better education quality to the benefit of all pupils, ensuring further that also special educational needs children will be able to stay a part of the mainstream school system, close to their home-environment; enhancing thereby the likelihood for these to pass their school-leaving examination. This change in attitude is all important for successful inclusion in that the changing of practice is controversial both among teachers and parents. Without their support it is difficult no matter how well-designed a formula funding model is to ensure that the objective of inclusion is successfully achieved. Parallel with the right attitude the teachers must also be equipped with the skills and competences to handle challenges inherent in teaching more diverse groups. Similarly, the managements must be able to balance the tension invariably arising between budgetary and education-related matters.

#### **16.4. REDESIGNS – IF, HOW AND WHEN?**

The dissertation brings forth a range of practice-relevant findings which are important to consider when a formula funding model is to be studied or (re)designed; a main point being the appropriateness and expediency of considering the formula funding model as a package of control. The application of the package-notion motivates a more holistic approach to the understanding of control and behavior and the above discussions clearly illustrate that if only parts or specific components of the formula funding model are taken into account, e.g. the mere mode of allocation or how much funds is devolved, the necessary understanding of the link between fund-

ing model design and managerial practice cannot be obtained. But combined with the proposed idea that the resulting managerial practice is determined by the level of budgetary risk and the competitive pressure brought upon service providers through the design of the full formula funding model a hopefully relevant tool for understanding current practice together with the potential behavioral effects of redesigns can be obtained from the content of the dissertation.

As the formula funding model is made up by a range of different components the individual municipality is confronted with a multitude of possible design configurations, each of which through the joint effect of the full set of components determines the position of the funding model in the context of the theory developed in Chapter 7. The framework presented here brings together design considerations and managerial practice and can, as discussed, be used to evaluate how a redesign of specific components or the introduction of new ones will influence the actual implications of the funding model. The idea is that changing an individual component according to the political desire will decrease or increase the level of budgetary risk or competitive pressure and through this the impact of the full model. Accepting thus that managerial practice is determined by the specific mix of competitive pressure and budgetary risk a range of design-related questions or considerations can be drawn from the content of the dissertation. These are summarized in Table 16.1 and relate to the components which have been found to be important for managerial practice. For example, the size of the pupil dependent allotment is found to be relevant for determining both the level of budgetary risk and competitive pressure. Thus, an important consideration becomes that of deciding the size of the payment per pupil. Similar, a range of other components have been identified to be important for the overall implication of the formula funding model either by affecting one or both of the proposed control characteristics. Albeit the table summarizes the main considerations springing from the above study it is important to keep in mind that a specific or even a non-listed component may in other situations be just as, if not more, important than the ones presented; elucidating once again the importance of studying the specific formula funding model through the lens of a package of control.

**Important design considerations**

- The size of the *pupil dependent allotment*.
- How much of the special educational funds are to be devolved to the local level? And how much of the cost is the individual school district to cover if a child is referred to comprehensive special needs services?
- How early is the *preliminary spending* made final? That is, how contingent is the general budget upon enrollment changes throughout the entire school year and how definitive is the special education budget once announced?
- *Funding object – pupil enrolled*. If the number of *pupils enrolled* is chosen as the object of funding then, how precisely is the funding model to capture enrollment changes? That is, how tightly are funds to be coupled to the individual child also in relation to special needs education? Will funds for example follow the pupil in case of school change?
- *Funding object – district children*. Inspired by the idea of making schools aware of the cost paid to other providers and the amount of funds allotted to other providers, *district children* as the object of funding, can be a mean to make schools aware of how much funds is actually allotted to pupils enrolled elsewhere. Not only in other public schools but in particular also in private schools.
- Are the school districts to be allowed to affect how many pupils are to be enrolled locally by developing local *enrollment guidelines*? Can the devolvement of the *transportation costs* be a mean to motivate the management to become creative in attracting a broader set of potential pupils also those living further away?
- *District structure* – is the management to be responsible for multiple departments?
- How large is the local scope to be in terms of line-item discretion, carry-overs, purchasing agreements or that of establishing for example local special needs classes?
- How is the referring process to be organized? Who holds the final responsibility for deciding the types of services to be given to pupils with lesser but also more severe special educational needs?
- Is it possible to develop *control systems* which elucidate a needed depth of investigation into the link between *effects, activities and budget size*, so that, the control systems not merely monitor and evaluate whether the ‘correct’ procedures have been implemented but rather review the quality of the results produced.
- Is the overall formula funding model designed so that it encourages a prudent practice to be created in relation to both the control and steering of general and special needs education?

- *Textbox 16.1 Important considerations when designing a formula funding model*

The principle idea across the design considerations relates to the question of how much funding and decision-making power and capabilities are to be devolved to the local level respectively retained at the municipal level. Reflecting the dilemma illus-

trated throughout, between local decision-making freedom and the retaining of central control. The latter, as discussed, potentially leading to a too large share of the education-related funding not coming into play thereby hampering the creation of proper local incentives as well as increasing the likelihood for more adverse and undesirable behavioral responses to appear. The questions thus reflect the idea that holding the local management responsible for both education and budgetary related aspects will make them a more accountable part of the education process motivating thereby a prudent practice and use of funds. At the same time, the questions do not merely relate to how much funding is to be devolved but also more broadly to how much decision-making power is in fact to be given locally. Albeit local decision-making discretion is looked upon as an advantage it may in some situations be more feasible to keep the decision-making power at the central level. For example, as discussed, when it comes to the distribution of responsibilities for making referrals and deciding upon the types of special needs services to be established locally. Here a central decision-making body for the more comprehensive services may be an advantage to ensure that the actual need for services across the entire municipality is taken into account and moreover that this is also the case when decisions are to be made on the type and location of services given to the individual child. Likewise, albeit the establishment of local special needs classes in principle means that pupils may stay part of the local environment such services, so to speak, remain in reality segregated services. Questioning the pursuit of the overall vision of inclusion and endangering the actual quality of service provided since the sufficient knowledge and competences needed for meeting the needs of these pupils may not be present in newly established classes. Allowing too much local discretion can thus be problematic as it may end up hampering the vision of inclusion making this more fictive than real.

The questions above reflect the dilemma between wanting to create an accountable and responsible management, who takes into account both education and budgetary aspects when performing their job, while still being able to ensure that the needs of all pupils, including those with special educational needs, are properly addressed. An appropriate balance between central and local decision-making power must, in other words, be created buttressed by a proper balance of budgetary risk and competitive pressure. This balance is not only important in terms of prompting behavior which is in line with the political objective of the service area but also for discouraging behavior which is not. The importance of political objectives has been emphasized throughout the dissertation, in that, these are understood to be the guiding principles for the process of funding with the formula funding model functioning as the all important mechanism for creating behavior which is in-line with these objectives. Although few direct financial incentives in relation to particular political objectives are found in the two field studies, the study clearly illustrates how design and management control strategy together can, if the formula funding model is designed appropriately, encourage even more strongly, behavior in-line with the politi-

cally set objectives. Even in situations where the objectives may not represent desirable choices from the local perspective.

As the formula funding models must be viewed as a full package of control it is indeed important that proper incentives are given so that neither of the two budgetary frames (general and special needs education) is overemphasized at the expense of the other. The general increase in the cost associated with special needs education combined with the growing demands for consolidation and budgetary compliance and control has over the last couple of years led to an attempt to control the budget for special needs education. Being able to do so is of course important due to the large amount of money spent here but also because the funding models, as discussed, may have created unwanted and adverse incentives in relation to the use of special needs education. Yet, despite the often eye-catching amount allocated to special needs education it is important to keep in mind that the far largest share of the resources set aside for education is spent in the mainstream/general public school system where also the majority of pupils is enrolled. Accordingly, it is obviously detrimental if an increased focus on the special needs education frame comes at the expense of controlling and creating proper incentives for the general education frame. Clear incentives for prudent management must therefore also be given for this part of the formula funding to ensure the overall efficiency and quality of the service provided; underlining the importance of not ‘forgetting’ or overemphasizing neither the control of the special needs education frame, nor vice versa that of the general education frame.

To decide if or when a formula funding model should be adjusted or redesigned is not unproblematic. A redesign may create new incentives buttressing the political objectives and due to possible synergies this can even trigger stronger behavioral responses than expected if considering only the isolated effect of the individual components. The changing of the interaction between the different parts of the funding model due to a redesign may however as well create and prompt behavior which in a broader sense is adverse and unintended possibly outweighing the aloof and potential benefits associated with the particular redesign. Yet, in other situations a redesign may only lead to a bare rearranging of incentives affecting not the overall behavioral impact of the formula funding model. Thus, if a school system performs according to both spending and level and use of special needs education like that of comparable municipalities it might not, based on the notion “don’t fix it if it isn’t broke”, be advisable or expedient to seek to change or redesign the formula funding model. Likewise if the competitive pressure is increased unwanted behavioral responses may occur. Because the competitive pressure, as discussed, to a great extent is determined by the presence and prevalence of private schools the specific level of competitive pressure induced onto providers depends on the competitiveness of the actual system. In situations where the school system is affected strongly by private school competition it will from the perspective of wanting to create opportunities for fair and equal competition be most feasible to increase the competitive pressure,

though accepting the accompanying possible disadvantages, by improving the abilities of public schools to compete over pupils. Furthermore, in a situation where the private schools are engaged in a sort of ‘market segmentation’ catering primarily to the needs of specific groups and minorities an enhancement of the general competitive level may bring with it a range of disadvantages in terms of sub-optimization and a deterioration of cooperation across the public schools. Potentially even threatening the equal access to services for all types of pupils, making it therefore less advisable to enhance the general competitive pressure. Whether a given formula funding model therefore needs to be redesigned hence depends heavily on the context in which the schools are operating as well as their general performance. Because from a cost benefit perspective it is not beneficial to initiate a major redesign process if the school system is already performing satisfactory both in terms of efficiency and quality of service.

## 16.5. CONCLUDING REMARKS

The incorporation of financial incentives into the formula funding models used to allocate funds from the Danish municipalities to the school districts is by some considered to be a contentious issue, in that, the allocation of funds in their eyes should be needs-based. That is, driven by actual needs of the pupils with the subsequent managerial practice remaining unaffected by other considerations than that of meeting the actual needs of the pupils as appropriately as possible. This concern is especially prevalent in connection to special needs education and inclusion. That the needs of the pupils must be met as appropriately as possible is of course crucial and the ideal goal. Yet, it is utopian to imagine a school system where financial considerations never come into play as it is a part of a larger public sector subject to a strict budgetary frame. The question is also whether it, in effect, is possible or even advisable to seek a design where financial incentives are not present. Because if a formula funding model functions as a mere reimbursement system an important tool for encouraging providers to operate prudently and efficiently is lost. Threatening not only the realizations of the discussed rationales of formula funding models i.e. efficiency, equitability and accountability, but also leading to situations where budget holders may be motivated to overstate needs or tasks due to no countervailing incentives to moderate such expenses. Further inherently in all designs is the potential for adverse behavior; elucidated already in Chapter 3 by revealing how the distribution of responsibilities over time have played a role in determining the setting and the types of pupils being referred to special educational services. Reflected further in the two field studies by showing how the formula funding model components may create different types of incentives; some potentially adverse while others support the political objectives of the services area. The question when designing formula funding models should accordingly not be whether it is advisable to incorporate financial incentives into the allocation of funds but rather whether the chosen formula funding model design creates the right incentives.



The dissertation has shown that funding models indeed do affect the managerial practice of the school management under study as that the design of the formula funding model is vital for which tasks are left at the hand of the management, for the decision-making scope and level of discretion available here and more so also for the types of more adverse behavioral responses which potentially may arise. The highlighted schism, inherently present when designing formula funding models, between wanting to create an accountable and responsible management against the desire to uphold and retain central control, makes the core task when designing a formula funding model, that of finding the correct, well-balanced mix between budgetary risk and competitive pressure so that proper incentives are given for the entire education process. This balance may be achieved in many ways through the use of different payment types and different component designs. Yet, what however remains crucial is that this is done in a way so that potentially adverse behavioral aspects are kept in mind; making it important to also develop proper control systems able to monitor and control that such behavior is not threatening the overall effectiveness of entire school system.

The above content show that tensions or splits may arise at multiple levels throughout the process funding when it comes to decide how must decision-making power and funds are to be devolved to the next organizational level. This was elucidated in Chapter 2 where the tension between decentralization and centralization was seen to exist between the state and the municipalities and more so between the state and municipalities at the one hand against the local school districts on the other. Tensions which are rooted in the desire to widen the scope for local actions, with all the expected benefits in terms of improved decision-making and resource utilization, against the need for a retained or enhanced central control over e.g. education-related goals and the content of teaching. This schism is, as discussed, not unique for the Danish school system but akin to similar international reform processes discussed by Hood *et al.* (1999), Broadbent & Guthrie (2008) and Ezzamel *et al.* (2008) who from especially a British perspective have discussed these developments under the term ‘modernizing governance’ where the intention has been to create ‘re-regulated-self-governance’. Yet, a range of other splits are also elucidated, namely between the municipal administration and the politicians; between the school principal and the management team members and potentially between the management and the teachers. A core contribution of this dissertation is thus the illustration of how the pursuit of the ‘responsible and calculating individual’ as proposed by Miller (2001:380) manifests itself in the practice of Danish school management. That is, the field studies illustrate how the anchoring of responsibilities locally creates a management who “*act freely, yet in accordance with the specified economic norms*” when bringing about desired objective such as improved resource utilization and quality of service; but also how the devolvement of budgetary responsibility is seen to become an intertwined part of the creation of a new mindset which acknowledges the appropriateness of enhanced inclusion. Moreover, it is illustrated how the ‘economic norm’ may come to clash with the professional competences and perceptions

stemming from the teacher profession itself, requiring the management to be able to balance the field of tension created between the two. The study in this way reveals how this economic mindset is slowly trickling down through the layers of the organization from the municipal administration, to the school management, further to the department heads and finally all the way down to the individual teacher. Demanding these also to act as “responsible and calculating individuals” who not only take education-related matters into concern but also more budgetary-related ones. Overall emphasizing the central idea of this dissertation that since financial incentives are an inherent and essential part of a properly designed formula funding model and since these indeed have been found to affect the managerial practice of school managers it becomes ever more important to ensure that the management is equipped with the needed skills to manage and balance the need for quality and equal access to services against the need for prudent practice and budget compliance. With the overall goal of ensuring that pedagogy and funding go hand in hand.

This dissertation has been written during a period where the Danish public school system once again has taken the center stage of the political arena, manifested in the passing of a new public school reform in 2013, a new working hour agreement for teachers followed by a nationwide lockout in 2013 and the 2012’ redefinition and demarcation of what constitutes special needs education. Stressing with the new Statute the overall vision of inclusion. The data collection for this study in fact ended before the new public school reform came into force in 2014. As a part of the reform the decision-making scope of the school management is enhanced with the advantages and disadvantages that this may entail. Opening up for further necessary research into the subject of enhanced local accountability and decision-making. Moreover, parallel with the final words of the dissertation being written the newly elected government has announced the need for an expedite examination and overhaul of the scale and implication of the inclusion-efforts taking place across the Danish municipalities. Resulting in a heated discussion on whether the attempts to include pupils with special needs in the mainstream classes and environment has gone too far and have been forced through all too soon. The renewed debate underlines the importance of the research conducted above but brings also with it a need for further investigation into the subject to gain an even deeper understanding of the initiatives which have to be taken in order to facilitate and ensure that the vision of inclusion becomes successful for all parties involved.

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## SUMMARY

Studying and thereby enhancing the understanding of the behavioral impact of the formula funding models used to allocate funds from the Danish municipalities to the local public school districts is the aim of this dissertation. A framework is proposed which, based on the theoretical understanding of viewing a formula funding model as a package of control, puts forward that the joint effects of the funding model components will determine respectively the actual competitive pressure and level of budgetary risk brought upon the providers, and therefore with it the resulting managerial practice. The framework is applied in two qualitative field studies carried out in two Danish municipalities. The studies reveal that the managerial practice of the management under study is strongly affected by the specific formula funding model design; which influences and determines the scope for action but also the opportunity/danger for more adverse behavioral responses to be triggered. The field studies make plain that the level of competitive pressure and budgetary risk are very influential in ensuring that the funding model is more than a reimbursement system, making it instead a mean through which providers are encouraged to operate prudently and efficiently ensuring also the quality of services. A correct balance of or mix between the level of budgetary risk and competitive pressure must however be found.